

## On the Scaphisomatini (Coleoptera: Staphylinidae: Scaphidiinae) of the Philippines, III: the genus *Baeocera* Erichson

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**On the Scaphisomatini (Coleoptera: Staphylinidae: Scaphidiinae) of the Philippines, III: the genus *Baeocera* Erichson** - The Philippine species of *Baeocera* Erichson, 1845 are reviewed. Currently, seven species are known from the archipelago, twelve additional species are described as new in the present study: *B. alticola* sp. nov., *B. danielae* sp. nov., *B. fortis* sp. nov., *B. hypomeralis* sp. nov., *B. jejuna* sp. nov., *B. jankodadai* sp. nov., *B. jeani* sp. nov., *B. lousi* sp. nov., *B. mindanaosa* sp. nov., *B. procerula* sp. nov., *B. profana* sp. nov., and *B. wolfgangi* sp. nov. A key to species is provided. Illustrations of aedeagi are given for *B. globosa* (Pic), *B. palawana* (Löbl), and *B. simoni* (Pic), known previously in females only, and more detailed illustrations of the internal sacs of the aedeagi are given for some of the species described by Löbl, 1972.

**Keywords:** Coleoptera - Staphylinidae - Scaphidiinae - *Baeocera* - taxonomy - Philippines.

### INTRODUCTION

Overviews of several genera of Philippine Scaphisomatini were recently given in two of my papers (Löbl, 2011a and 2011b). The present paper deals with an additional Scaphisomatini genus, *Baeocera* Erichson, 1845. *Baeocera* is with 247 species currently recognized as valid one of the more diverse genera of staphylinoid beetles feeding on slime molds and fungi, and almost world-wide in distribution. Although members of *Baeocera* are often common in floor litter of Asian tropical and subtropical forests (personal observations), they were not adequately sampled in the Philippines. Currently, seven species are reported from that archipelago, all known only by their respective type material (Löbl, 1972). The diagnostic important male characters remained unknown in three of them (see Löbl, 1971b, 1972). As expected, newly examined collections revealed a number of additional species and other new data providing a more adequate insight of the diversity and distribution of the group, in spite of obvious major gaps in sampling. With the present study the number of the known Philippine species of *Baeocera* increases to nineteen. Still, this may be just a fraction of the number of species that actually occur in the Philippine archipelago.

### MATERIAL AND METHODS

The length of specimens is measured from the anterior pronotal margin to the inner apical angle of the elytra. The width of body is measured at the widest point of the elytra. The lateral margin carinae of pronotum and elytra are given as seen in dorsal

view. The basal striae may be very shallow and inconspicuous in humeral areas of the elytra: they are better to be observed in diffused light. The length and width of mesepimera and metanepisterna refer to their exposed portion. The number of abdominal ventrites is that of the free visible ventrites. The length of the aedeagi is measured without eventually extruded parts of the internal sacs. The aedeagi were cleared in isopropanol and mounted in Canada balsam on acetate slides fixed on the same pins as the specimens. The aedeagi are "lying on side", i.e. rotated to 90°. Their respective sides as given refer to the morphological sides, with the ostium situated dorsally.

Most of the examined specimens were extracted from litter in winkler-moczarski devises (see Löbl, 1992) and in berlese funnels. Material collected by L. Deharveng and J. Orousset in 1979/1980 was unfortunately kept too long in an inappropriate way and is in poor condition, hardly suitable for study.

The primary types and other examined material are housed in the following collections:

- EUMJ Ehime University Museum, College of Agriculture, Matsuyama, Japan.
- FMNH Field Museum of Natural History, Chicago, USA.
- MHNG Muséum d'histoire naturelle, Geneva, Switzerland.
- MNHN Muséum National d'Histoire Naturelle, Paris, France.
- SMNS Staatliches Museum für Naturkunde, Stuttgart, Germany.
- ZMUB Zoologisches Museum, Museum für Naturkunde, Berlin, Germany.
- ZMUK Zoological Museum, University, København, Denmark.

TAXONOMY

*Baeocera* Erichson, 1845

Several informal species groups were recognized within the genus (see Löbl, 1992, 2012, Löbl & Stephan, 1993). They were based mainly on aedeagal characters that exhibit conspicuous variations, compared to other genera of Scaphidiinae, with the notable exception of *Scaphisoma* Leach, 1815. Four species groups are represented among the Philippine collections: the *B. brevicornis* group, the *B. lenta* group, the *B. ceylonensis* group, and the *B. monstrosa* group. These groups were defined by Löbl, 1971a, 1979, and 1992. The members of the *B. brevicornis* group have simple aedeagi that do not provide diagnostic characters easy to use. It is with five species comparatively species-rich in the Philippines, and includes both species that have reduced hind wings, *B. bicolorata* Löbl and *B. profana* sp. nov. The species of the other three groups possess highly derived aedeagi. As elsewhere in south-east Asia, the more species-rich is the *B. lenta* group. The *B. ceylonensis* and *B. monstrosa* groups are represented in the Philippines only by one or two species, respectively.

KEY TO THE PHILIPPINE SPECIES OF *BAEOCERA*

- 1 Elytron with sutural stria shorten, starting posterior level of pronotal lobe, basal stria absent . . . . . *B. mindanaosa* sp. nov.
- Elytron with sutural stria not shorten, starting at base, curved along pronotal lobe and usually extended along basal margin of elytron to form basal stria . . . . . 2

- 2 Elytron with sutural stria curved along basal margin to form complete basal stria extended to sides and joined with lateral stria . . . . . 3
- Elytron with sutural stria curved at base to form short, incomplete basal stria, not reaching sides and not joined with lateral stria . . . . . 14
- 3 Basal area of hypomeron distinctly punctate. Metanepisternal suture indistinct . . . . . *B. hypomeralis* sp. nov.
- Hypomeron impunctate, or with even, very fine punctation. Metanepisternal suture often distinct . . . . . 4
- 4 Lateral parts of metaventrite, submesocoxal punctures excepted, very finely punctate or impunctate. Larger species, body about 1.9 to 2.2 mm long . . . . . 5
- Most of metaventrite conspicuously coarsely punctate. Smaller species, body about 1.0 to 1.8 mm long . . . . . 6
- 5 Antennomere XI much longer than antennomere X, about 4.5 times as long as wide . . . . . *B. alticola* sp. nov.
- Antennomere XI slightly longer than antennomere X, about 3 times as long as wide . . . . . *B. fortis* sp. nov.
- 6 Elytra darken apically. Antennae conspicuously short, antennomeres IX ad X each about 1.3 times as long as wide . . . . . *B. bicolorata* Löbl
- Elytra uniformly reddish-brown to black, or becoming lighter near apical margins. Antennae long, antennomeres IX and X each much longer than wide . . . . . 7
- 7 Metanepisterna distinct, clearly separated by deep suture. Sides of metaventrite with coarse punctures irregularly spaced, at least some puncture intervals larger than puncture diameters . . . . . 8
- Metanepisterna indistinct, not separated by clearly visible suture, with inner margin indicated by outer row of coarse punctures, eventually by fine stria. Sides of metaventrite very densely punctate, puncture intervals smaller than, or about as large as puncture diameters . . . . . 11
- 8 Elytron with coarse discal punctation extended apically to, or almost to, apical margin . . . . . 9
- Elytron with coarse discal punctation restricted onto smaller surface, areas near basal margin, along suture and at least entire apical third of disc very finely punctate, often appearing impunctate . . . . . 10
- 9 Sides of metaventrite conspicuously irregularly punctate. Abdominal ventrite 1 lacking distinct punctures, or with few scattered, variably large punctures posterior basal puncture row. Hind wings not reduced . . . . . *B. brunnea* (Löbl)
- Sides of metaventrite almost regularly punctate, except for smooth area near apical margin. Sides of abdominal ventrite 1 distinctly punctate. Hind wings reduced . . . . . *B. profana* sp. nov.
- 10 Fairly large species, body 1.50-1.80 mm long. Lateral parts of metaventrite with punctation conspicuously irregular . . . . . *B. palawana* (Löbl)
- Small species, body 1.15-1.35 mm long. Lateral parts of metaventrite with punctation regular . . . . . *B. simoni* (Pic)

- 11 Larger species, body 1.5 mm long. Coarse elytral punctures about as large as puncture intervals and in anterior two thirds of disc extended up to sutural stria. Aedeagus with parameres narrowed apically . *B. boettcheri* (Löbl)  
 - Smaller species, body 1.2-1.3 mm long. Coarse elytral punctures either much smaller than puncture intervals, or restricted onto lateral part of disc . . . . . 12
- 12 Abdominal ventrite 1 usually with distinct basal longitudinal wrinkles. Distinctly punctate area of elytron extending to, or almost to, sutural stria. Aedeagus with parameres straight and slightly widened apically in dorsal view . . . . . *B. procerula* sp. nov.  
 - Abdominal ventrite 1 lacking wrinkles. Distinctly punctate area of elytron restricted onto outer surface, eventually few coarse punctures situated also on inner part of elytral disc. Aedeagus with parameres slightly arcuate, not widened apically in dorsal view . . . . . 13
- 13 Antennomeres VII and VIII each about 4 times as long as wide. Aedeagus with parameres distinctly widened in middle . . . . . *B. louisi* sp. nov.  
 - Antennomeres VII and VIII each about 2.5 to 3 times as long as wide. Aedeagus with parameres not widened in middle . . . . . *B. danielae* sp. nov.
- 14 Entire surface of elytral disc with even, coarse punctation. Abdominal ventrite 1 not rugulose at base, with coarse, irregular punctation, basal punctures not elongate . . . . . *B. wolfgangi* sp. nov.  
 - Large surface of elytral disc very finely punctate, coarse punctures restricted onto smaller surface . . . . . 15
- 15 Most of abdominal ventrite 1 coarsely punctate . . . . . *B. globosa* (Pic)  
 - Abdominal ventrite 1 very finely punctate posterior basal punctures, appearing impunctate . . . . . 16
- 16 Aedeagus with parameres notched mesally, in level of tip of median lobe . . 17  
 - Aedeagus with parameres not notched, abruptly narrowed posterior mid-length . . . . . *B. jeani* sp. nov.
- 17 Internal sac of aedeagus with basal tuft of spine-like structures . *B. dilutior* Löbl  
 - Internal sac of aedeagus without spine-like structures . . . . . 18
- 18 Parameral notches situated posterior mid-third of parameres, section of parameres posterior notch distinctly narrower than section anterior notch . . . . . *B. jankodadai* sp. nov.  
 - Parameral notches situated in mid-third of parameres, section of parameres posterior notch hardly narrower than section anterior notch . . . . . *B. jejuna* sp. nov.

### *Baeocera serendibensis* group

#### *Baeocera bicolorata* Löbl, 1979

Figs 1-3

*Eubaeocera bicolor* Löbl, 1972: 80; holotype ♂, ZMUB, type locality: "Heightspe".

*Baeocera bicolorata* Löbl, 1979: 86, replacement name for *Eubaeocera bicolor* Löbl, 1972 (nec *Baeocera bicolor* Achard, 1920).

MATERIAL EXAMINED: 1 ex., LUZON, Mountain Prov., Sogong Cave Valley, 21.XII. 1979, leg. L. Deharveng & J. Orousset #79 (MHNG). – 1 ex., Mountain Prov., Mt. Nangaoto,

2240m, 27.VII.1985, leg. M. Sakai (MHNG). – 6 ex., Ifougaio Prov., Mount Data Lodge, 2200-2300m, 23-24.XII.1979, leg. L. Deharveng & J. Orousset #85, 97, 105, 106 (MHNG). – 4 ex., Mount Data, near Lodge, 8.I.90, J. Orousset #165 (MHNG). – 1 ex., Ifougaio Prov., Mt. Pangao, 2350m, nr. Data, 14.VII.1985, leg. M. Sakai (EUMJ). – 7 ex., Benguet Prov., Paoay 2400 nr. Sayangan, 11.VII.1985, leg. M. Sakai (EUMJ, MHNG). – 2 ex., Banguio Prov., 1500 near Crystal Caves, 1-2.I.1980, leg. L. Deharveng & J. Orousset #128 (MHNG). – 3 ex., Banguio, Mt. Santo Thomas, ca. 2150m, 14.I.80, leg. L. Deharveng & J. Orousset #188, 190, 196 (MHNG).

**HABITAT:** Moderately and very moist moss on rocks, moss on trunks, forest floor humus, various vegetation debris.

**DISTRIBUTION:** Philippines, Luzon.

**COMMENTS:** The species was previously reported only from two localities, Heightspe and Dallalasan. It may be easily separated from its Philippine congeners by the colour pattern of the elytra and the conspicuously short antennae. "Heightspe" is possibly a misspelling of Heights Place, which is according to Preliminary Gazetteer, 1953, at 16°38' N and 120°44' E.

***Baeocera brunnea* (Löbl, 1972)**

Figs 4, 5

*Eubaecera brunnea* Löbl, 1972: 82; holotype ♂, ZMUB, type locality: SIARGAO, Surigao del Norte Prov., Dapa.

**MATERIAL EXAMINED:** 8 ex., LUZON, Lagunas Prov., Banahaw above Kinabuhayan, 800m, 25.XI.95, leg. I. Löbl (MHNG). – 5 ex., Lagunas Prov., Mt. Makiling above Mad Springs, 400-700m, 19-22.XI.1995, leg. J. Kodada (MHNG). – 1 ex., Lagunas Prov., Mt. Makiling, 450-550m, 20.XI.1995, leg. I. Löbl (MHNG). – 1 ex., Lagunas Prov., Los Banos, Watt. Weston (FMNH). – 1 ex., LEYTE, Visca N Baybay, prim. forest 200-500m, 22.II.-10.III.1991, leg. W. Schawaller & al. (SMNS).

**HABITAT:** Leaf litter and other floor debris, in primary forest and on slope of degraded rainforest.

**DISTRIBUTION:** Philippines, Luzon, Leyte, Siargao.

**COMMENTS:** The species was previously known only from the type locality, which has been mislocated in Mindanao. In addition to characters given in the key, the shape of the parameres is diagnostic (Figs 4, 5).

***Baeocera palawana* (Löbl, 1971)**

Figs 6-9

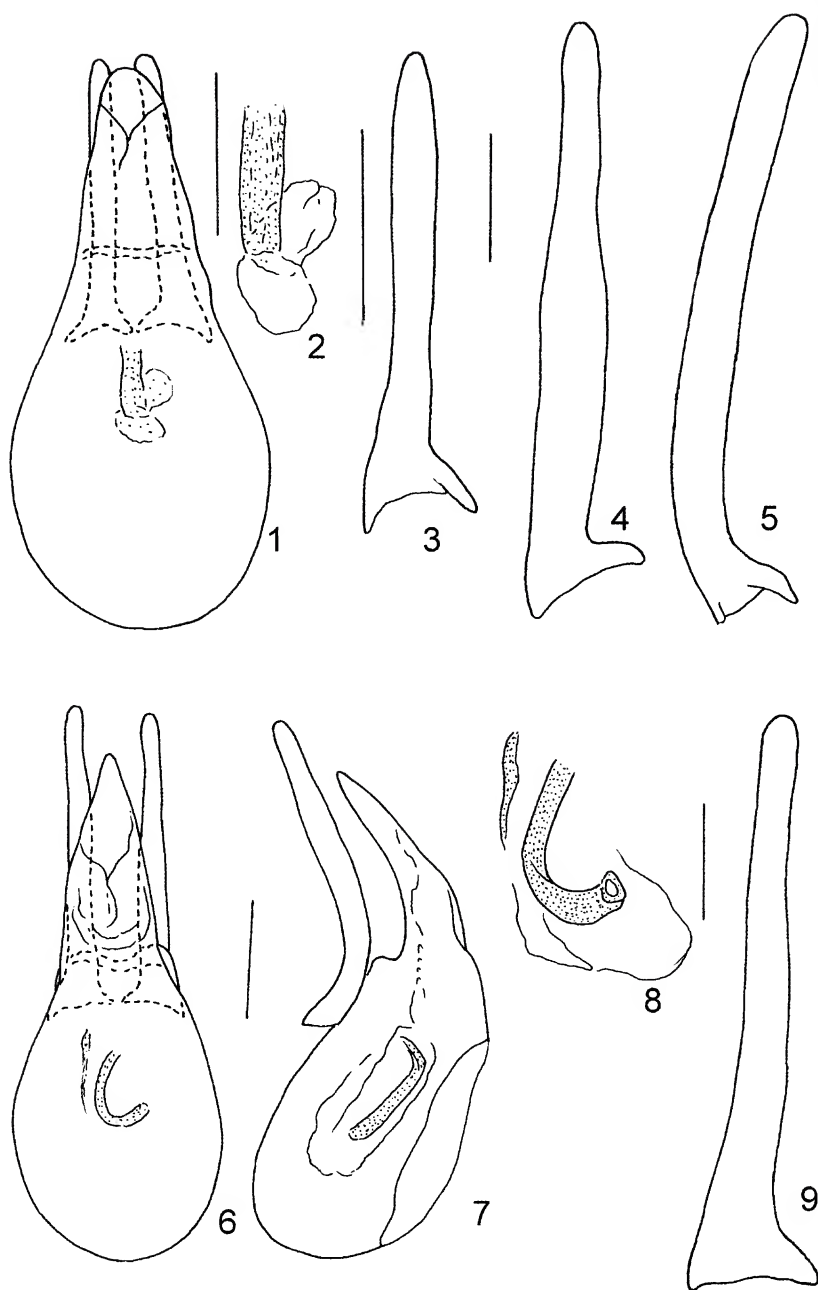
*Eubaecera palawana* Löbl, 1971b: 249; holotype ♀, ZMUK, type locality: PALAWAN, Brookes Point, Uring Uring.

**MATERIAL EXAMINED:** 1 ex., PALAWAN, Central Prov., Sadang, 30.XI.1995, leg. I. Löbl. – 1 ex., Central Prov., above San Rafael, 300m, 4.XII.1995, I. Löbl and 2 ex. with the same data but leg. J. Kodada (all MHNG).

**HABITAT:** Leaf litter, in primary forest and at edge of secondary, degraded forest, near sea level and on hills at low elevation.

**DISTRIBUTION:** Philippines, Palawan.

**COMMENTS:** The description of *B. palawana* was based on a single female from Uring Uring, Palawan. The newly examined specimens are smaller than the holotype, with the body 1.50-1.60 mm long and 1.05-1.15 mm wide. The aedeagus of *B. palawana* (Figs 6-9) is 0.45 mm long and similar to that in other species of the *B. serendibensis* group. In particular, it reminds that of *B. brunnea* (Löbl), although the shape of



FIGS 1-9

(1-3) *Baeocera bicolorata* Löbl, aedeagus (1), internal sac (2) and paramere (3) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for internal sac and paramere. (4, 5) *Baeocera brunnea* (Löbl), paramere in dorsal and lateral views; scale bar = 0.05 mm. (6-9) *Baeocera palawana* (Löbl), aedeagus (6, 7) in dorsal and lateral views, internal sac (8), paramere in ventral view (9); scale bar = 0.1 mm for the aedeagus, = 0.05 mm for internal sac and paramere.



the parameres is different. These two species may be distinguished by the pattern of the coarse elytral punctation which is limited onto a strongly reduced surface of the disc in *B. palawana*.

***Baeocera profana* sp. nov.**

Figs 10-13

HOLOTYPE: ♂, LUZON, Mountain Prov., Sagada, 15-19.XII.1979, leg. L. Deharveng & J. Orousset #49 (MHNG).

PARATYPES: 1 ♂, LUZON, Mountain Prov. N & NE of Sagada 15-19.XII.1979, leg. L. Deharveng & J. Orousset #68. – 2 ♂ with the same data but #39. – 1 ♀, with the same data but #43. – 1 ♂ with the same data but #49. – 1 ♂, with the same data but # 50. – 1 ♀, with the same data but #51. – 1 ♀, with the same data but #53. – 1 ♀ with the same data but #55. – 1 ♂ with the same data but #143 (all MHNG).

DESCRIPTION: Length 1.40-1.55 mm, width 0.95-1.05 mm. Body, femora and tibiae uniformly reddish-brown to blackish, apex of abdomen, antennae and tarsi lighter than body. Body moderately convex dorsally. Eyes large. Length ratio of antennomeres as: III 7: VI 10: V 13: VI 11: VII 15: VIII 11: IX 13: X 13: XI 15. Antennomeres III to V almost evenly narrow, VI slightly wider than V; VII moderately wide, about 4 times as long as wide; VIII about as wide as VI, about 4 times as long as wide; IX to XI distinctly wider than VII, XI about 2.5 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours almost continuously arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra not covering apex of abdomen. Elytron with sutural stria fairly deep, curved at base to form basal stria joined with lateral stria, adsutural area flat or slightly raised. Elytral punctation similar to pronotal punctation on humeral area and along lateral margin; remaining surface fairly coarsely punctate, with puncture intervals about as large to 3 times as large as puncture diameters. Hind wings reduced. Hypomera impunctate. Mesepimera flat, about 2.5 to 3 times as long as wide and about 3 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with centre impunctate, around centre distinctly punctate. Lateral parts of metaventrite impunctate in front of metacoxa, coarsely punctate on remaining surface; some coarse punctures about as large as or larger than puncture intervals. Submesocoxal lines parallel or somewhat arcuate, with very coarse marginal punctures extended along anapleural suture. Submesocoxal area about 0.03 to 0.04 mm long, shortest interval between its margin and metacoxa about 0.09-0.10 mm. Metanepisterna flat, 0.08-0.10 mm wide, weakly narrowed anteriad, with coarsely punctate suture. Metepimera striate along inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures coarse and slightly elongate, interrupted in middle and extended to lateral margins. Punctation very fine on entire mesal area and along apical margin up to lateral margins, distinct and irregular on lateral surface posterior basal punctures row. Tibiae slightly curved.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 10-13, 0.36-0.38 mm long. Median lobe moderately sclerotized.

HABITAT: The specimens were in samples of soil, humus, sieved litter, and moss on trunks.

DISTRIBUTION: Philippines, Luzon.

ETYMOLOGY: The species epithet is a Latin adjective meaning common.

COMMENTS: This species may be readily distinguished from other Philippine members of the *B. serendibensis* group by its punctuation pattern. It shares with *B. bicolorata* Löbl reduced hind wings and comparatively short metaventrite, but it may be easily separated from latter by the larger body, much longer antennae that are similar to and still longer than those in *B. procerula*, and much coarser elytral punctuation covering almost entire disc. The elytral punctuation is similar in the widely distributed *B. serendibensis* (Löbl) and in the Taiwanese *B. sauteri* Löbl. These two species have, however, fully developed hind wings and comparatively longer metaventrite. *Baeocera serendibensis* may be distinguished also by the mesal part of abdominal ventrite 1 distinctly punctate.

***Baeocera simoni* (Pic)**

Figs 14-16

*Scaphosoma simoni* Pic, 1920: 5; holotype ♀, MNHN; type locality: LUZON, Antipolo.

*Eubaeocera simoni*; Löbl, 1971a: 248.

MATERIAL EXAMINED: 2 ♂, LUZON, Lagunas Prov., Mt. Banahaw above Kinabuhayan, 800m, 26.XI.95, leg. I. Löbl for. litter. – 1 ♂, Lagunas Prov., Mt. Banahaw above Kinabuhayan, 600m, 24.XI.95, leg. I. Löbl, degraded rainforest, fungi on log. – 1 ♂, 1 ♀, Lagunas Prov., Mt. Banahaw ca 1 km Kinabuhayan, 500m, 26.XI.95, leg. I. Löbl, litter degr. forest. – 1 ♂, Lagunas Prov., Mt. Makiling, 450-550 m, 20.XI.1995, leg. I. Löbl, leaf litter. – 1 ♂, Lagunas Prov., Mt. Makiling above Mad Springs, 400-700m, 19.-22.XI.1995, leg. J. Kodada (all MHNG).

COMMENTS: This species was previously known only by the female holotype, and it was redescribed by Löbl, 1972. The basal wrinkles of the first abdominal ventrite are variably long, always distinct. The aedeagus is illustrated for the first time in the present paper.

REDESCRIPTION: Length 1.15-1.32 mm, width 0.80-0.95 mm. Body, femora and tibiae uniformly reddish-brown, apex of abdomen, antennae and tarsi lighter. Body moderately convex dorsally. Eyes fairly large. Length ratio of antennomeres as: III 6: VI 8: V 10: VI 10: VII 11: VIII 8: IX 10: X 11: XI 12. Antennomeres III and IV almost evenly narrow; V and VI almost even, each slightly wider than IV; VII moderately wide, about 3.5 times as long as wide; VIII distinctly wider than VI, slightly narrower than VII, about 3 times as long as wide; IX to XI distinctly wider than VII, XI about 2.5 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours separately arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra not covering apex of abdomen, with lateral carinae concealed or shortly exposed near base. Elytron with sutural stria fairly deep, curved at base to form basal stria joined with lateral stria, adsutural area flat. Elytral punctuation almost evanescent or very fine and similar to pronotal punctuation on areas along base, sutural stria, lateral margin, and on apical third to half of discal surface; remaining surface fairly finely punctate, with puncture intervals about 2 to 3 times as large as puncture diameters. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 2.5 times as long as wide and about twice as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with centre



impunctate, around centre distinctly punctate. Lateral parts of metaventricle impunctate on large basal area, rather coarsely punctate on remaining surface; coarse puncture about as large as, or smaller than, puncture intervals. Submesocoxal lines somewhat arcuate, with fairly coarse marginal punctures extended along anapleural suture. Submesocoxal area about 0.03-0.04 mm long, shortest interval between its margin and metacoxa about 0.10 mm. Metanepisterna flat, 0.04-0.07 mm wide, weekly narrowed anteriorly, with distinct, punctate suture. Metepimera deeply sulcate. Abdominal ventrite 1 lacking microsculpture, with basal puncture row not or barely interrupted in middle and extended to lateral margin, consisting of fairly coarse and elongate punctures. Punctuation posterior basal puncture row very fine, few additional distinct punctures sometimes present. Tibiae straight.

**Male characters:** Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 14-16, 0.32-0.38 mm long. Median lobe moderately sclerotized.

**HABITAT:** Specimens were found in sieved leaf and other forest floor debris and in mosses on logs, in degraded rainforests, at altitudes ranging from 400 to 800 m above s. l.

**DISTRIBUTION:** Philippines, Luzon.

**COMMENTS:** This species is a member of the *B. serendibensis* group. In addition to the distinguishing characters given in the key above, it may be separated from *B. palawana* (Löbl) and *B. brunnea* (Löbl) by the smaller size of the body, and by the aedeagus with angulate ventral wall of the median lobe, at base of the apical process (seen in lateral view).

### *Baeocera lenta* group

#### *Baeocera boettcheri* (Löbl)

Figs 17, 18

*Eubaeocera boettcheri* Löbl, 1972: 83; holotype ♂, ZMUB, type locality: LUZON, Nueva Vizcaya Prov., Imugan.

**DISTRIBUTION:** Philippines, Luzon.

**COMMENTS:** This species is 1.5 mm long. Thus, it is large compared to other Philippine members of the group, and well characterized by the entire basal striae and extended coarse punctuation of the elytra. The shape of parameres and of the structures of the internal sac of the aedeagus (Figs 17, 18) are diagnostic. The species was not found in the new collections and remains known only by its holotype.

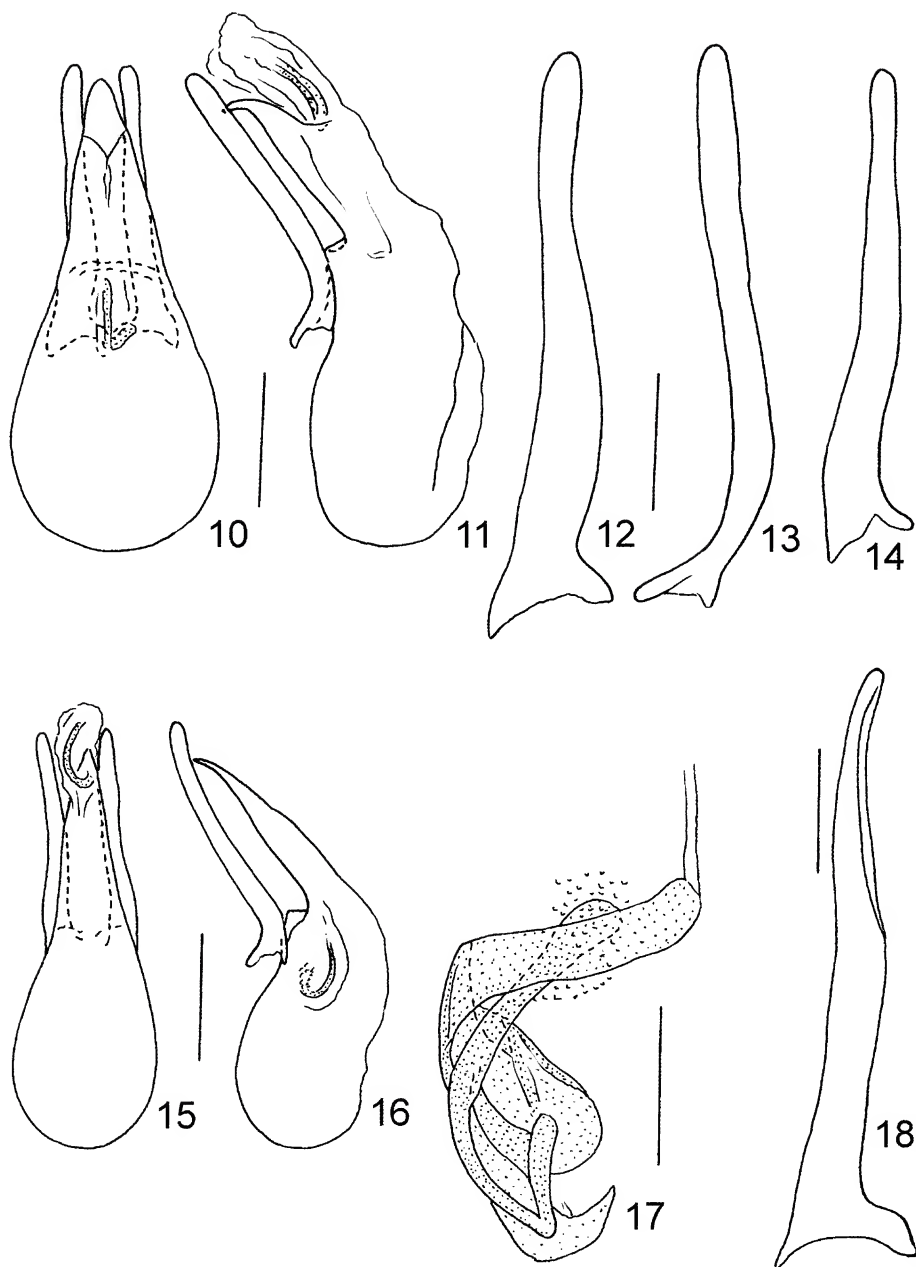
#### *Baeocera danielae* sp. nov.

Figs 19-22

**HOLOTYPE:** ♂, LUZON, Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700 m, 24.XI.95, leg. I. Löbl, forest litter (MHNG).

**PARATYPES:** 2 ♂, 1 ♀, LUZON, Lagunas Prov., Mt. Makiling 4 km SE Los Banos, 8.IV.1977 / berlese forest litter, leg. L. Watrous (all MHNG).

**DESCRIPTION:** Length 0.92-0.96 mm, width 0.60-0.68 mm. Body convex dorsally, dark brown, apices of elytra slightly lighter, femora and tibiae reddish-brown, tarsi and antennae almost yellowish. Eyes large. Length ratio of antennomeres as: III 8: VI 7: V 7: VI 6: VII 8: VIII 7: IX 10: X 10: XI 11. Antennomeres III to VI evenly



FIGS 10-18

(10-13) *Baeocera profana* sp. n., aedeagus (10, 11) in dorsal and lateral views, paramere (12, 13) in dorsal and lateral views; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere. (14-16) *Baeocera simoni* (Pic), paramere (14) in dorsal view, aedeagus (15, 16) in dorsal and lateral views; scale bar = 0.1 mm for aedeagus, = 0.05 for paramere. (17-18) *Baeocera boettcheri* (Löbl), internal sac (17) and paramere (18) in dorsal view; scale bars = 0.05 mm.

narrow; VII about 3 times as long as wide, much wider than VI; VIII distinctly wider than VI, about 2.5 times as long as wide; IX to XI each distinctly wider than VII, XI about 2.5 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours almost continuously arcuate; pubescence visible at 50 times magnification. Pronotum extremely finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed, or its minute tip visible. Elytra almost covering apex of abdomen, with lateral carinae concealed in dorsal view. Elytron with sutural stria fine, curved along basal margin to form basal stria. Latter very shallow and hardly visible in outer half of basal width. Elytral punctation very fine on most of surface, narrow patch of less fine punctures situated on lateral area, starting somewhat posterior base and extended about to elytral mid-length. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, comparatively large, about 3 times as long as wide and about 4 times as long as interval to mesocoxa. Metaventrite slightly convex in middle, with fairly large impunctate central area, around centre distinctly, rather finely punctate. Lateral parts of metaventrite impunctate near metacoxae, rather finely, irregularly punctate on remaining surface, punctures becoming somewhat larger toward anterior part of metanepisterna. Submesocoxal lines parallel, with marginal punctures about as large as those around smooth centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.02 to 0.03 mm long, shortest interval between its margin and metacoxa about 0.07 mm. Metanepisterna flat, fused to metaventrite, suture indicated by outer row of puncture lying in somewhat impressed stria. Metepimera with slightly carinate inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures moderately coarse, not elongate, contiguous in middle, extended to lateral margins; basal rugosity absent. Punctuation very fine posterior basal puncture row. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs hardly widened. Aedeagus as in Figs 19-22, 0.24-0.27 mm long. Median lobe moderately sclerotized.

DISTRIBUTION: Philippines, Luzon.

ETYMOLOGY: The species is named in honour of my wife Daniela, in acknowledgement to her efficient assistance under difficult field conditions.

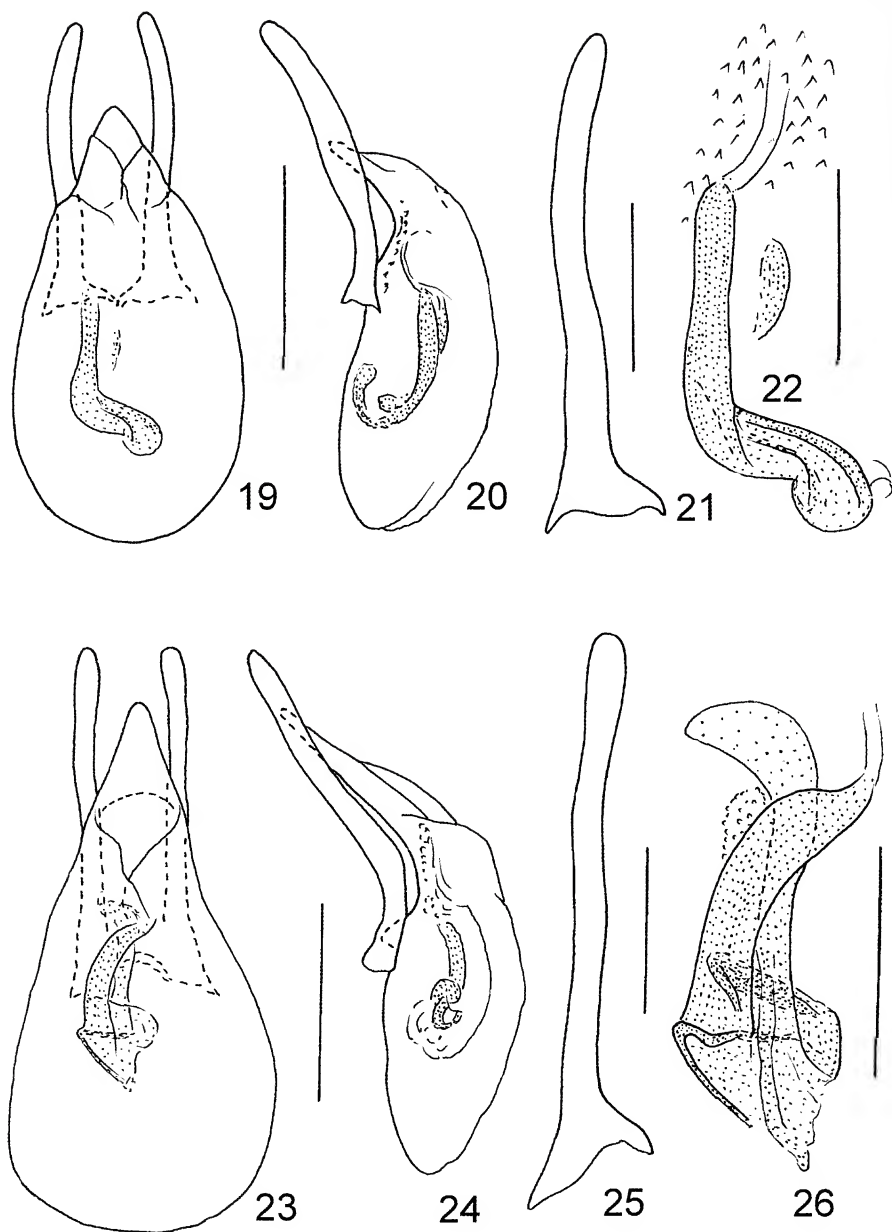
COMMENTS: This species may be distinguished from other members of the *B. lenta* group by its elytral punctation distinct only on a very small lateral surface, in combination with the short antennae, the entire sutural striae of the elytra, and the parameres not widened in middle.

### *Baeocera globosa* (Pic, 1926)

Figs 23-26

*Scaphosoma globosum* Pic, 1926: 1; lectotype ♀, MNHN; type locality: LUZON, Balbalan. *Eubaeocera globosa*; Löbl, 1971a: 248.

MATERIAL EXAMINED: 4 ex., LUZON, Lagunas Prov., Mt. Makiling, 450-550m, 20.IX.1995, leg. I. Löbl. – 1 ex., same but 400m, summit road, 19.XI.1995. – 1 ex., same but near Mad Springs, 400-450m, 19.XI.95. – 30 ex., Lagunas Prov., 4 km SE Los Banos, 8., 9., and 11. IV.1977, leg. L.E. Watrous. – 11 ex., Lagunas Prov., Mt. Makiling above Mad Springs, 400-700m, 19.-22.XI.1995, leg. J. Kodada. – 22 ex., Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700m, 24.XI.95, leg. I. Löbl. – 2 ex., Lagunas Prov., Mt. Banahaw near school about 1 km from Kinabuhayan, 600m, 28.IX.1995, leg. J. Kodada. –



FIGS 19-26

(19-22) *Baeocera danielae* sp. n., aedeagus (19, 20) in dorsal and lateral views, paramere (21) and internal sac (22) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac. (23-26) *Baeocera globosa* (Pic), aedeagus (23, 24) in dorsal and lateral views, paramere (25) and internal sac (26) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac.

27 ex., Mountain Prov. N. & NE Sagada, 15-19.XII.1979, leg. L. Deharveng & J. Orousset #39, 41, 44, 53, 68, 143. – 1 ex., Mountain Prov., Mount Data Lodge, 2200-2300m, 23-24.XII.79, leg. L. Deharveng & J. Orousset #168. – 1 ex., Mountain Prov., Ambasing, 1440m, 16.XII.1979, leg. L. Deharveng & J. Orousset # 18. – 1 ex., Banguio Prov., Banguio, 1500m near Crystal Caves, 1-2.I.1980, leg. L. Deharveng & J. Orousset #128 (all MHNG).

**HABITAT:** Leaf litter and other forest floor debris in evergreen rainforest and mountain forest, ranging from 400 to about 2300m above sea level.

**DISTRIBUTION:** Philippines, Luzon.

**COMMENTS:** The description of this species was based on a female from "Balbalan, Luzon" (MNHN), originally placed in *Scaphisoma* Leach. Löbl (1971b) transferred it to *Eubaecera* Cornell, 1967 (a junior synonym of *Baecocera* Erichson, 1845), and provided its redescription (Löbl, 1972). The aedeagal characters of *B. globosa* are illustrated in Figs 23-26.

***Baecocera hypomeralis* sp. nov.**

Figs 27-30

**HOLOTYPE:** ♂, LUZON, Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700m, 24.XI.95, I. Löbl, forest litter (MHNG).

**PARATYPES:** 4 ♀, with the same data as the holotype (MHNG). – 1 ♀, same data but 500m, litter, degraded rainforest (MHNG). – 1 ♀, LUZON, Lagunas Prov., Mt. Banahaw 1 km from Kinabuhayan 600m, 26.XI.95, I. Löbl, litter, degraded rainforest (MHNG). – 1 ♀, with the same data but near school. – 2 ♂, 1 ♀, with same data as holotype but 600-700m, trail to Cristalino, leg. J. Kodada and B. Rygová (MHNG). – 1 ♀, Lagunas Prov., Mt. Banahaw 1 km from Kinabuhayan 600m, 26.XI.95, leg. J. Kodada and B. Rygová (MHNG). – 1 ♂, LEYTE, Visca N Baybay cultiv. land, 3.3.1991, leg. W. Schawaller & al. (SMNS). – 7 ♂, 14 ♀, MINDANAO, Davao Prov., 25 km W of New Batan, 1200m, 20-22.V.1996, leg. Bolm (SMNS, MHNG).

**DESCRIPTION:** Length 1.40-1.70 mm, width 0.98-1.20 mm. Body fairly strongly convex, dark reddish-brown, pronotum usually slightly darker than elytra, abdomen, femora and tibiae slightly lighter than elytra, tarsi and antennomeres I and II light reddish-brown, antennomeres III to XI light, yellowish. Eyes large. Length ratio of antennomeres as: III 14: IV 14: V 15: VI 14: VII 17: VIII 14: IX 18: X 17: XI 19. Antennomeres III to VI narrow, evenly narrow, each about 6 to 7 times as long as wide; VII distinctly wider than VI, about 5 times as long as wide; VIII somewhat narrower than VII, almost 5 times as long as wide; IX to XI wider than VII, XI about 4 times as long as wide. Pronotum and elytra lacking microsculpture, pubescence indistinct at 50 times magnification. Lateral contours of pronotum and elytra almost continuously rounded. Pronotum with lateral margin carina concealed in dorsal view, punctation fine and dense. Hypomeron with fairly coarse punctures on lower area of its posterior half, appearing impunctate on remaining surface. Tip of scutellum exposed. Elytra moderately narrowing apically, with lateral margin carina visible near base in dorsal view, lateral margins almost evenly arcuate, sutural striae deep, curved basally to form shallow basal striae reaching sides and joined with lateral striae. Basal halves of elytra coarsely punctate, most puncture diameters somewhat smaller than puncture intervals. Adsutural areas of elytra flat, in basal halves with very dense and fairly coarse punctures. Apical third to half of elytra very finely punctate. Hind wing not reduced. Mesepimeron about twice as long as interval between its tip and mesocoxa, and about



3 times as long as wide. Metaventrite flattened in middle, impunctate on small central area, with rather coarse and dense punctures on remainder of median surface, conspicuously coarsely punctate laterally, in particular near anterior margins. Metacoxal process flat, punctate. Submesocoxal lines parallel, with coarse, not elongate marginal punctures. Submesocoxal areas 0.03 mm long. Metanepisternum very narrow, its margin indicated by impressed puncture row. Metepimeron impressed and flat along inner margin. Abdominal ventrite 1 lacking obvious microsculpture, with basal punctures coarse and somewhat elongate, not rugulose; remaining punctation very fine. Following ventrites very finely punctate, with barely visible punctulate microsculpture. Protibiae and mesotibiae barely curved, metatibiae straight.

*Male characters:* Protarsomeres barely widened. Aedeagus as in Figs 27-30, 0.38-0.43 mm long, moderately sclerotized.

*HABITAT:* Forest floor litter, mainly moist leaves, found in evergreen, degraded forests.

*DISTRIBUTION:* Philippines, Luzon, Leyte, Mindanao.

*ETYMOLOGY:* The species epithet refers to the prothoracic hypomera.

*COMMENTS:* This species may be easily separated from its Philippine congeners by the presence of distinct hypomeral punctures. Other species of the group possessing distinctly punctate hypomera are *B. cribrata* Löbl, 1992, *B. puncticollis* Löbl, 1977, and *B. microptera* Löbl, 1986, known from Pakistan, northern India and Nepal, and an undescribed species from Thailand (see Löbl, 1990, 1997). *Baeocera hypomeralis* may be easily distinguished from these species by the entire basal striae of the elytra. *Baeocera puncticollis* and the Thai species differ conspicuously by the comparatively coarse pronotal punctation, and *B. cribrata* and *B. puncticollis* differ by strongly shortened sutural striae. In addition, *B. cribrata* has the entire hypomera coarsely punctate, and *B. microptera* has also the mesanepisterna distinctly punctate.

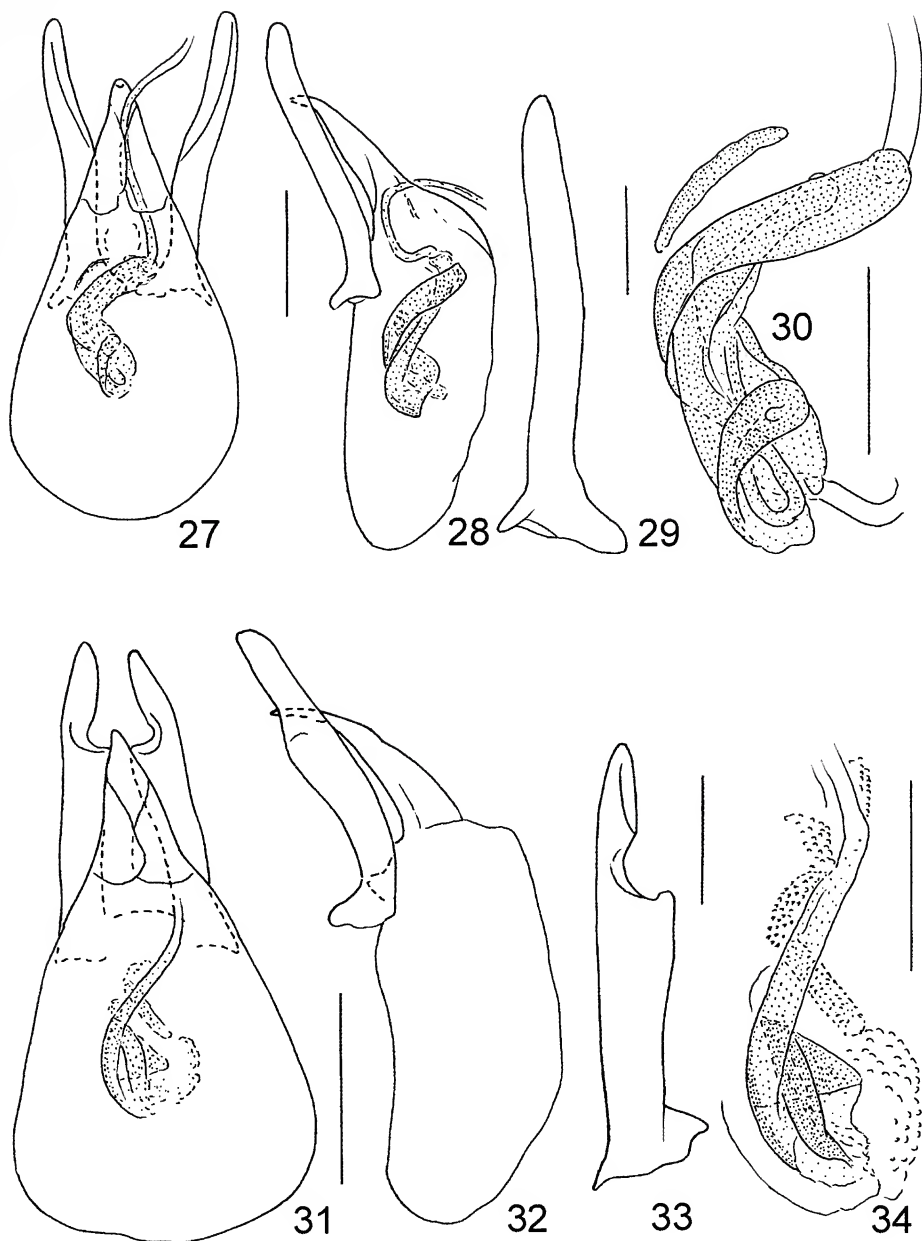
***Baeocera jankodadai* sp. nov.**

Figs 31-34

*HOLOTYPE:* ♂, PALAWAN, Central Prov., San Rafael, 300m, leaf litter sec. forest, leg. I. Löbl, 4.XII.95 (nr. 13) (MHNG).

*PARATYPES:* 3 ♂, 3 ♀, with the same data as the holotype. – 7 ♂, 5 ♀, PALAWAN, Central Prov., above San Rafael, ca 300m, degraded forest on slope, 4.XII.1995, leg. J. Kodada. – 2 ♀, Central Prov., Sabang, prim. forest nr. sea 30.XI.1995, leaf litter, leg. I. Löbl. – 5 ♂, 2 ♀, Central Prov., Conception, large logs across Conception river, NE San Rafael, ca 20m, 8.XII.1995, leg. J. Kodada & B. Rygová (all MHNG).

*DESCRIPTION:* Length 1.0-1.20 mm, width 0.65-0.80 mm. Body convex dorsally, dark brown or dark reddish-brown, femora and tibiae lighter, apex of abdomen, tarsi and antennae yellowish. Eyes large. Length ratio of antennomeres as: III 5: IV 6: V 7: VI 7: VII 10: VIII 6: IX 9: X 10: XI 11. Antennomeres III, IV and VI evenly narrow, V slightly wider than IV, about 4 times as long as wide, VI about 5 times as long as wide; VII comparatively narrow, slightly wider than V, about 4 times as long as wide; VIII distinctly narrower than VII, about 3 times as long as wide; IX to XI each distinctly wider than VII, XI about 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours separately arcuate; pubescence visible at 50



FIGS 27-34

(27-30) *Baeocera hypomeralis* sp. n., aedeagus (27, 28) in dorsal and lateral views, paramere (29) and internal sac (30) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac. (31-34) *Baeocera jankodadai* sp. n., aedeagus (31, 32) in dorsal and lateral views, paramere (33) and internal sac (34) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac.

times magnification. Pronotum very finely punctate, with lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra almost covering apex of abdomen, with lateral carinae concealed or shortly exposed near base. Elytron with sutural stria deep, curved at base to form basal stria reaching about basal mid-width, adsutural area flat. Elytral punctation almost evanescent or very fine, similar to pronotal punctation along base, on narrow strip along sutural stria and on entire apical third. Remaining surface of elytral disc with fairly coarse punctures, puncture intervals about 2 to 3 times as large as diameters of coarse punctures. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 3 times as long as wide and about 4 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with impunctate central surface small, around centre distinctly punctate. Lateral parts of metaventrite impunctate on posterior area; remaining surface with irregular, fairly coarse punctures. Punctures on lateral parts of metaventrite larger than those around centre, usually slightly elongate and larger than, or about as large as puncture intervals. Submesocoxal lines parallel, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.02 to 0.03 mm long, shortest interval between its margin and metacoxa about 0.10 mm. Metanepisterna flat, with suture indistinct, indicated by outer row of coarse punctures. Metepimera with carinate inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures fairly coarse, not or barely interrupted in middle, extended almost to lateral margins, elongate laterally, and with 0.02-0.04 mm long wrinkles. Punctuation posterior basal puncture row very fine on side of ventrite, distinct on mesal area. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 31-34, 0.30-0.35 mm long. Median lobe moderately sclerotized.

*HABITAT:* The specimens were found at low elevation, from sea level to about 300 m above sea level. They come from both, primary forest as strongly degraded secondary forest, and were found in accumulation of rotten leaf samples and on a rotten trunk.

*DISTRIBUTION:* Philippines, Palawan.

*ETYMOLOGY:* The species is named in honour of my friend Jan Kodada, Bratislava, Slovakia, who collected most of the specimens of this new species.

*COMMENTS:* This species is similar to *B. dilutior* in external characters and shares with it the notched parameres. It may be distinguished from *B. dilutior* by the elytral punctation distinct on a broad surface of the disc and the internal sac of the aedeagus lacking basal tuft of spine-like structures.

***Baeocera jeani* sp. nov.**

Figs 35-38

*HOLOTYPE:* ♂, LUZON, Lagunas Prov., Mt. Makiling, 450-550m, 20.XI.1995, I. Löbl (MHNG).

*PARATYPES:* 4 ♂, 2 ♀, with the same data as the holotype. – 1 ♂, 1 ♀, LUZON, Lagunas Prov., Mt. Makiling, 400m, 19.IX.1995, leg. I. Löbl. – 3 ex., Lagunas Prov., Mt. Makiling summit rd 500m, 20.IX.1995, leg. I. Löbl. – 4 ♂, Lagunas Prov., Mt. Banahaw near school about 1 km from Kinabuhayan, 600m, 28.IX.1995, leg. J. Kodada and 2 ♀, with the same data but

500m, leg. I. Löbl. – 1 ♂, 2 ♀, Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700m, 24.XI.95, leg. I. Löbl. – 1 ♂, 1 ♀, Lagunas Prov., Mt. Banahaw about 1 km from Kinabuhayan, 500m, 26.XI.95, leg. I. Löbl. – 1 ♂, 1 ♀, the same data but 800m, 25.XI.95 (all MHNG).

**DESCRIPTION:** Length 1.10-1.28 m, width 0.70-0.82 mm. Body convex dorsally, dark brown or dark reddish-brown, femora and tibiae lighter, apex of abdomen, tarsi and antennae yellowish. Eyes large. Length ratio of antennomeres as: III 7: IV 7: V 9: VI 7: VII 11: VIII 7: IX 10: X 9: XI 11. Antennomeres III to VI almost evenly narrow, V hardly wider than IV; VII comparatively narrow, distinctly wider than VI, about 3 times as long as wide; VIII distinctly narrower than VII, about as narrow as VI; IX to XI each distinctly wider than VII; XI about twice as long as wide. Pronotum and elytra without microsculpture, with lateral contours continuously arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed or its minute tip exposed. Elytra almost covering apex of abdomen, with lateral carinae concealed or shortly exposed near base. Elytron with sutural stria deep, curved at base to form basal stria ending in outer half of basal width, adsutural area somewhat raised. Elytral punctation almost evanescent or very fine, similar to pronotal punctation along base, on fairly wide strip along sutural stria and on almost entire apical third. Remaining surface of elytral disc coarsely punctate, intervals between coarse punctures about 2 to 3 times as large as punctures diameters. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, almost 3 times as long as wide and about 4 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with impunctate central surface small, around centre distinctly punctate. Lateral parts of metaventrite impunctate on posterior area; remaining surface with irregular, coarse punctures. Punctures on lateral parts of metaventrite larger than those around centre, usually elongate and larger than, or about as large as puncture intervals. Submesocoxal lines convex, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.03 to 0.04 mm long, shortest interval between its margin and metacoxa about 0.08-0.09 mm. Metanepisterna flat, with suture indicated by impressed row of outer coarse punctures. Metepimera with carinate inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures coarse, extended by wrinkles. Lateral wrinkles usually 0.04-0.06 mm long, mesal wrinkles short; basal puncture row contiguous in middle, reaching to or almost to lateral margins; punctures near lateral margins moderately elongate. Punctuation posterior basal puncture row very fine on sides of ventrite, distinct on mesal area. Tibiae straight.

**Male characters:** Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 35-38, 0.36-0.40 mm long. Median lobe moderately sclerotized.

**HABITAT:** Degraded rainforest, in leaf litter, mostly on slope and in ravine.

**DISTRIBUTION:** Philippines, Luzon.

**ETYMOLOGY:** The species is named in honour of Jean Orousset, Paris, France, who collected together with Louis Deharveng.

**COMMENTS:** The parameres abruptly narrowed at level of the tip of the median lobe are similar to those in *B. incisa* Löbl, 1973 from Sabah, and *B. manasensis* Löbl,

1984 and *B. pseudincisa* Löbl, 1984 from northern India. *Baeocera jeani* shares with *B. incisa* sinuate parameres (in lateral view) and the shape of the median lobe, but the shape of the sclerotized complex of the internal sac is distinctive. These two species may be readily distinguished by the elytral punctation that is restricted onto a small surface in the new species, while it covers most of the disc in *B. incisa*, and by the abdominal sternite 1 having conspicuous basal wrinkles in *B. jeani*, lacking in *B. incisa*. Both, *B. manasensis* and *B. pseudincisa*, have the internal sac of the aedeagus similar to that in *B. jeani*. These two species share rugulose base of the first abdominal ventrite, with wrinkles significantly shorter, and the lateral surfaces posterior wrinkles are distinctly punctate in *B. pseudincisa*. Both, *B. pseudincisa* and *B. manasensis*, differ notably from *B. jeani* by their elytral punctation that is coarse on almost entire discal surface in the former, and coarse on most of the basal half of the disc in the latter species.

***Baeocera jejuna* sp. nov.**

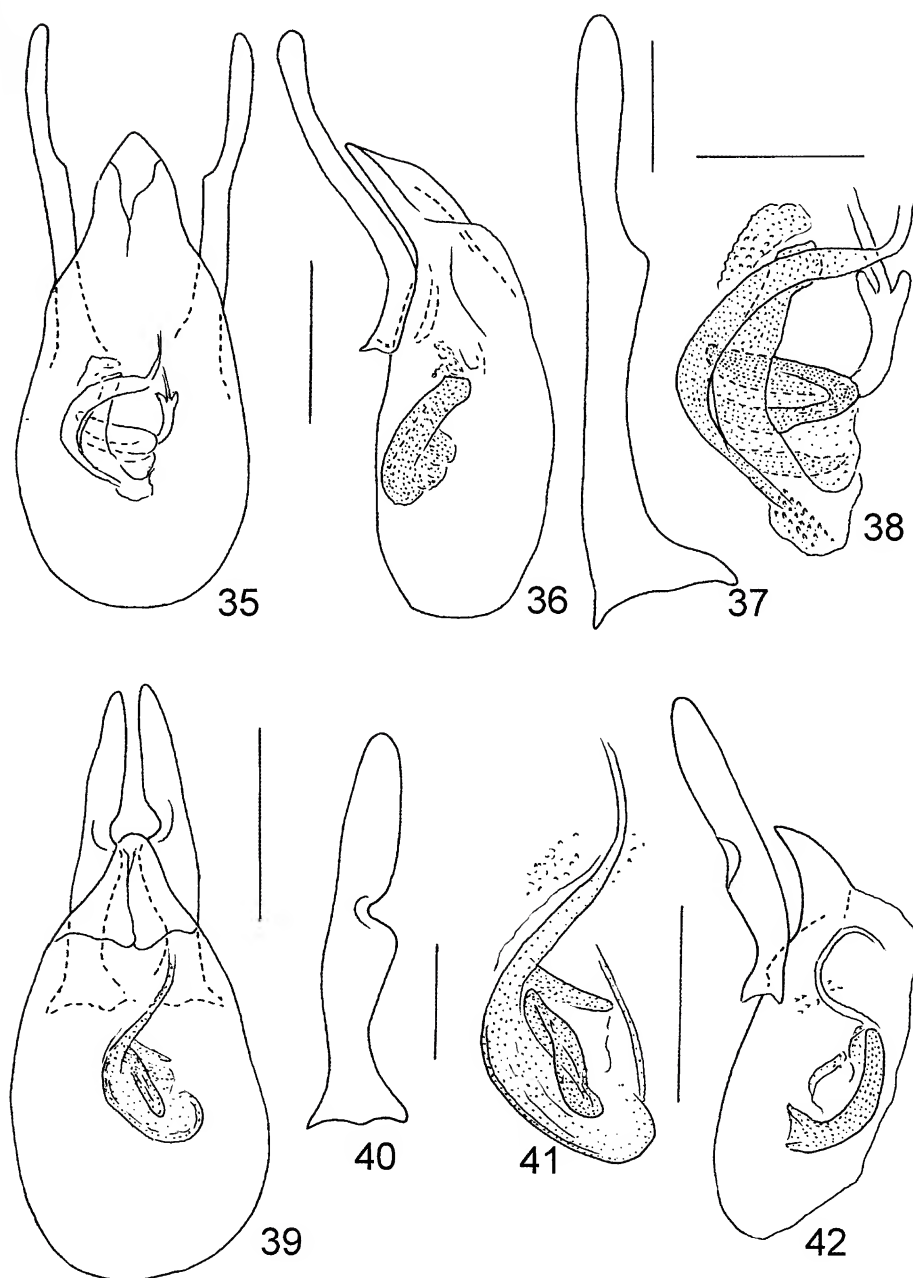
Figs 39-42

HOLOTYPE: ♂, PALAWAN, Central Prov., Conception, 50 m degr. forest leaf litter, 2.XII.1995, leg. I. Löbl (MHNG).

PARATYPES: 4 ♂, 3 ♀, PALAWAN, with the same data as the holotype. – 1 ♂, Central Prov., Sadang, prim. forest nr sea, 30.XI.1995, leg. I. Löbl, leaf litter (all MHNG).

DESCRIPTION: Length 1.05-1.15 mm, width 0.65-0.81 mm. Body uniformly reddish-brown, appendages and apex of abdomen lighter. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 7: IV 8: V 9: VI 9: VII 12: VIII 9: IX 12: X 12: XI 15. Antennomeres III to VI almost evenly narrow; VII moderately wide, about 4 times as long as wide; VIII about as narrow as VI, distinctly narrower than VII, about 4 times as long as wide; IX to XI each distinctly wider than VII, XI about 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours continuously arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Tip of scutellum exposed. Elytra almost covering apex of abdomen, with lateral carinae concealed. Elytron with sutural stria fairly deep, curved at base to form basal stria reaching about elytral mid-width, clearly separated from lateral stria, ad-sutural area somewhat raised. Elytral punctation almost evanescent or very fine and similar to pronotal punctation on areas along base, along lateral margin, and on apical third to half of discal surface, fairly coarse on remaining surface, with puncture intervals mostly larger than puncture diameters. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 3-4 times as long as wide and about 5 times as long as interval to mesocoxa. Margin of mesanepisterna carinate along mesepimera. Metaventrite flat in middle, with impunctate central surface small, around centre distinctly punctate, with long pubescence. Lateral parts of metaventrite impunctate on area along metacoxae; remaining surface with irregular, coarse punctures. Coarse punctures on lateral parts of metaventrite larger than those around centre and not or barely elongate, usually smaller than puncture intervals. Submesocoxal lines somewhat arcuate, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.03 mm long, shortest interval between its margin and metacoxa about 0.08-0.09 mm. Metanepisterna very





FIGS 35-42

(35-38) *Baeocera jeani* sp. n., aedeagus (35, 36) in dorsal and lateral views, paramere (37) and internal sac (38) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac. (39-42) *Baeocera jejuna* sp. n., aedeagus (39, 42) in dorsal and lateral views, paramere (40) and internal sac (41) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac.

narrow, fused to metaventrite, with suture indicated by outer row of coarse punctures. Metepimera striate along inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures fairly coarse, elongate, not interrupted in middle, extended almost up to lateral margins; with wrinkles about 0.02-0.04 mm long. Punctuation very fine posterior basal puncture row. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 39-42, 0.24-0.30 mm long. Median lobe moderately sclerotized.

*HABITAT:* Leaf litter in fairly dry primary and secondary forests, near sea level.

*DISTRIBUTION:* Philippines, Palawan.

*ETYMOLOGY:* The species epithet is a Latin adjective, referring to the comparatively poor external characters that separate the species from its allied.

*COMMENTS:* This species shares with *B. dilutior* most of its external diagnostic characters, including the elytral punctuation. As *B. jankodadai*, it differs drastically from *B. dilutior* by the internal sac of the aedeagus lacking basal tuft of spine-like structures. It differs from *B. jankodadai* by the shape of the parameres and the distinct elytral punctuation extended to, or almost to, the sutural striae.

***Baeocera lousi* sp. nov.**

Figs 43-46

*HOLOTYPE:* ♂, LUZON, Banguio Prov., Banguio, 1500m near Crystal Caves, 1-2.I.1980, leg. L. Deharveng & J. Orousset litter # 128 (MHNG).

*PARATYPES:* 22 ♂, 9 ♀, with the same data as the holotype. – 2 ♂, LUZON, Mt. Santo Thomas, 1850m, 14.I.80, leg. L. Deharveng & J. Orousset, #191, 192. – 1 ♀, Mountain Prov., Sagada, Suoy nr. Tataya-An 20.I.80 litter, #201, leg. L. Deharveng & J. Orousset (all MHNG).

*DESCRIPTION:* Length 1.02-1.15 mm, width 0.75-0.80 mm. Body and femora very dark brown to blackish, tibiae, tarsi and antennae lighter. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 7: IV 10: V 12: VI 12: VII 14: VIII 11: IX 13: X 13: XI 17. Antennomeres III and IV evenly narrow, V and VI almost even, each slightly wider than IV; VII moderately wide, about 4 times as long as wide; VIII about as narrow as VI, distinctly narrower than VII, about 4 times as long as wide; IX to XI each distinctly wider than VII, XI about 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours almost continuously arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra almost covering apex of abdomen, with lateral carinae concealed or shortly exposed near base. Elytron with sutural stria fairly deep, curved at base to form basal stria joined with lateral stria, adsutural area flat. Elytral punctuation almost evanescent or very fine and similar to pronotal punctuation on areas along base, on entire or almost entire inner half of disc, along lateral margin, and on apical half of discal surface, distinctly coarser and irregular on latero-anterior surface, with puncture intervals mostly larger than puncture diameters. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 2.5 times as long as wide and about 3 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with impunctate central surface small, around centre distinctly punctate. Lateral parts of metaventrite impunctate on narrow area along metacoxae; remaining surface with irregular, fairly

coarse punctures. Punctures on lateral parts of metaventrite only moderately larger than those around centre and not elongate, usually distinctly smaller than puncture intervals. Submesocoxal lines somewhat arcuate, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.03 to 0.04 mm long, shortest interval between its margin and metacoxa about 0.08 mm. Metanepisterna flat, 0.03-0.04 mm wide, not or hardly widened posteriad, with suture indistinct or indicated by impressed stria and outer row of coarse punctures. Metepimera striate along inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures fairly coarse, not elongate, not or barely interrupted in middle, extended to lateral margins. Punctuation very fine posterior basal puncture row. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 43-46, 0.29-0.34 mm long. Median lobe moderately sclerotized.

*HABITAT:* Most specimens were taken from vegetation debris accumulated in a depression, a few were found in a moist ravine, in and under fallen leaves.

*DISTRIBUTION:* Philippines, Luzon.

*ETYMOLOGY:* The species is named in honour of one of its collectors, Louis Deharveng, Paris, France.

*COMMENTS:* This species is another member of the *B. lenta* group. It is very similar to *B. danielae* from which it may be distinguished by the longer antennae with the antennomere III shorter than the antennomere IV and the antennomere VII and VIII each about 4 times as long as wide. In addition, the middle part of the parameres is widened in *B. lousi*, providing a distinctive character.

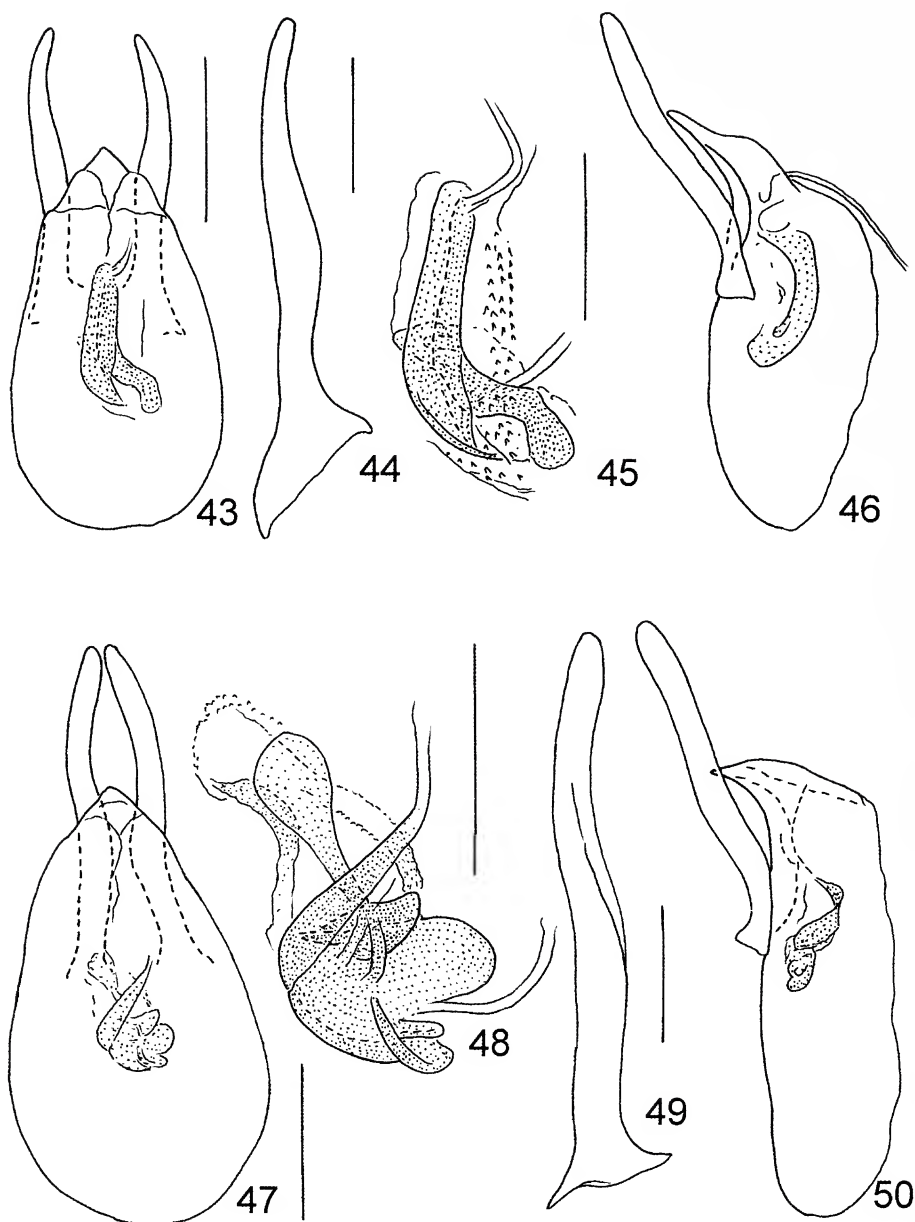
***Baeocera mindanaosa* sp. nov.**

Figs 47-50

*HOLOTYPE:* ♂, MINDANAO, Misamis Occ., 1700m, Don Victoriano, 1.-3.V.1996, leg. Bolm (SMNS).

*PARATYPES:* 1 ♀, MINDANAO, with the same data as the holotype (SMNS). – 3 ♂, MINDANAO, 30 km NW of Maramag, Bagongsilang, 1700m, 13.-17.V.1996, leg. Bolm, (SMNS, MHNG). – 2 ♀, MINDANAO, 30 km E of Malaybalay, Busoi, 1000m, 5.-9.V.1996, leg. Bolm, (SMNS, MHNG).

*DESCRIPTION:* Length 1.10-1.20 mm, width 0.76-0.84 mm. Body dark brown to blackish, elytra sometimes becoming lighter apically, abdomen, femora and tibiae dark reddish-brown, tarsi and antennae lighter. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 8: IV 9: V 10: VI 9: VII 11: VIII 8: IX 12: X 11: XI 17. Antennomeres III to VI almost evenly narrow; VII almost 4 times as long as wide, much wider than VI; VIII slightly wider than VI, about 4 times as long as wide; IX to XI each distinctly wider than VII, XI somewhat more than 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours continuously arcuate; pubescence hardly visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra almost covering apex of abdomen, with lateral carinae concealed in dorsal view. Elytron with sutural stria fine, starting more or less posterior level of margin of pronotal lobe, not curved anteriorly. Elytral punc-



FIGS 43-50

(43-46) *Baeocera louisi* sp. n., aedeagus (43, 46) in dorsal and lateral views, paramere (44) and internal sac (45) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac. (47-50) *Baeocera mindanaosa* sp. n., aedeagus (47, 50) in dorsal and lateral views, internal sac (48) and paramere (49) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for internal sac and paramere.

tation very fine on fairly short and variably wide humeral area, coarse and dense on remaining surface, including base near suture; punctures about as large as or smaller than puncture intervals. Hind wings not reduced. Hypomera impunctate. Mesepimera hardly impressed, about 3 times as long as wide and about twice as long as interval to mesocoxa. Margin of mesanepisterna not carinate along mesepimera. Metaventrite flat in middle, with impunctate central surface small, around centre coarsely punctate. Lateral parts of metaventrite almost entirely coarsely punctate; with punctures partly elongate, coarser than those on central area or on elytra, often distinctly larger than punctures intervals. Submesocoxal lines parallel, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.02 to 0.03 mm long, shortest interval between its margin and metacoxa about 0.08 mm. Metanepisterna flat, fused to metaventrite, suture indicated by outer coarse puncture row. Metepimera lacking stria along inner margin. Abdominal ventrite 1 lacking microsculpture, with basal punctures coarse, laterally somewhat elongate, not or barely interrupted in middle and extended to lateral margins. Punctuation coarse and irregular posterior basal puncture row. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs weakly widened. Aedeagus as in Figs 47-50, 0.33-0.37 mm long. Median lobe moderately sclerotized.

DISTRIBUTION: Philippines, Mindanao.

ETYMOLOGY: The species epithet refers to the island Mindanao.

COMMENTS: This species may be easily distinguished from the remaining Philippine congeners by the short sutural striae of the elytra. Several females possessing this character state were found in Leyte and are housed in the collections of SMNS and MHNG. These specimens may represent a distinct species. In absence of males they remain unidentified.

***Baeocera procerula* sp. nov.**

Figs 51-54

HOLOTYPE: ♂, LUZON, Lagunas Prov., Mt. Makiling, 400m, 19.IX.1995, leg. I. Löbl summit road, litter (MHNG).

PARATYPES: 4 ♂, LUZON, Lagunas Prov., 4 km SE Los Banos, 11. IV.1977, leg. L. E. Watrous. – 3 ♂, Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700m, 24.XI.95, leg. I. Löbl. – 7 ♂, Lagunas Prov., Mt. Banahaw near school about 1 km from Kinabuhayan, 600m, 28.IX.1995, leg. J. Kodada. – 3 ♂, 1 ♀, Lagunas Prov., Mt. Banahaw about 1 km from Kinabuhayan, 500m, 26.XI.95, leg. I. Löbl. – 20 ♂, 10 ♀, Mountain Prov., N. & NE Sagada, 15-19.XII.1979, leg. L. Deharveng & J. Orousset #38, 39, 43, 44, 51, 52, 53, 54, 55, 68, 69, 72. – 1 ♀, Mountain Prov., env. Sagada, near Latan Cave, 15-19.XII.1979, leg. L. Deharveng & J. Orousset #55. – 1 ♂, Mountain Prov., Vallon de Sogong Cave, 21.XII.79, leg. L. Deharveng & J. Orousset #79. – 2 ♂, 3 ♀, Banguio, 1500m, near Crystal Caves, 1-2.I.1980, leg. L. Deharveng & J. Orousset #128. – 2 ♂, 2 ♀, Mountain Prov., Sagada, 4-5.I.1980, leg. L. Deharveng & J. Orousset #143, 144. – 1 ♀, Mountain Prov., above Sagada, 9.I.1980, leg. L. Deharveng & J. Orousset #173. – 1 ♀, Mountain Prov., Sagada, near entry of Latipan Cave, 15.XII.79, leg. L. Deharveng & J. Orousset #222 (all MHNG).

DESCRIPTION: Length 1.02-1.23 mm, width 0.70-0.84 mm. Body very dark brown to black, apices of elytra narrowly lighter, abdomen entirely or only its apical segments reddish-brown, femora and tibiae reddish-brown, tarsi and antennae lighter than tibiae. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 7:



IV 7: V 10: VI 10: VII 11: VIII 9: IX 12: X 11: XI 13. Antennomeres III to VI very narrow, V and VI each about 5.5 times as long as wide, slightly wider and IV; VII narrow, about 3.5 times as long as wide; VIII slightly wider than VI, narrower than VII, almost 4 times as long as wide; IX to XI each distinctly wider than VIII, XI about 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours almost continuously arcuate; pubescence visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, lateral margin carinae concealed in dorsal view. Scutellum concealed. Elytra not covering apical abdominal tergites, with lateral carinae concealed. Elytron with sutural stria curved at base to form basal stria reaching sides and joined to lateral stria; basal stria often very shallow, adsutural area flat. Elytral punctation distinct although often fairly fine on most of anterior half to two thirds of discal surface, with puncture intervals mostly much larger than puncture diameters, apical third of elytron very finely punctate. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 3 times as long as wide and about 3 to 4 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with impunctate central surface fairly small, around centre coarsely punctate. Lateral parts of metaventrite with irregular, coarse punctures larger than those around centre, not or slightly elongate and often larger than puncture intervals. Narrow area along metacoxae impunctate. Submesocoxal lines parallel, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.02 mm long, shortest interval between its margin and metacoxa about 0.08 to 0.10 mm. Metanepisterna indistinct, fused with metaventrite. Metepimera striate at inner angle. Abdominal ventrite 1 lacking microsculpture, with basal punctures elongate, often extended by wrinkles, reaching to, or almost to lateral margins, interrupted in middle; punctation posterior basal punctures very fine, usually hardly visible. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 51-54, 0.28-0.35 mm long. Median lobe moderately sclerotized.

*HABITAT:* In samples of forest floor litter in both, shady and exposed sites, in degraded evergreen forest, in pine debris, in moss on trunks and on rocks.

*DISTRIBUTION:* Philippines, Luzon.

*ETYMOLOGY:* The species epithet is a Latin adjective meaning slightly elongate, referring to the elongate basal punctures of first abdominal ventrite.

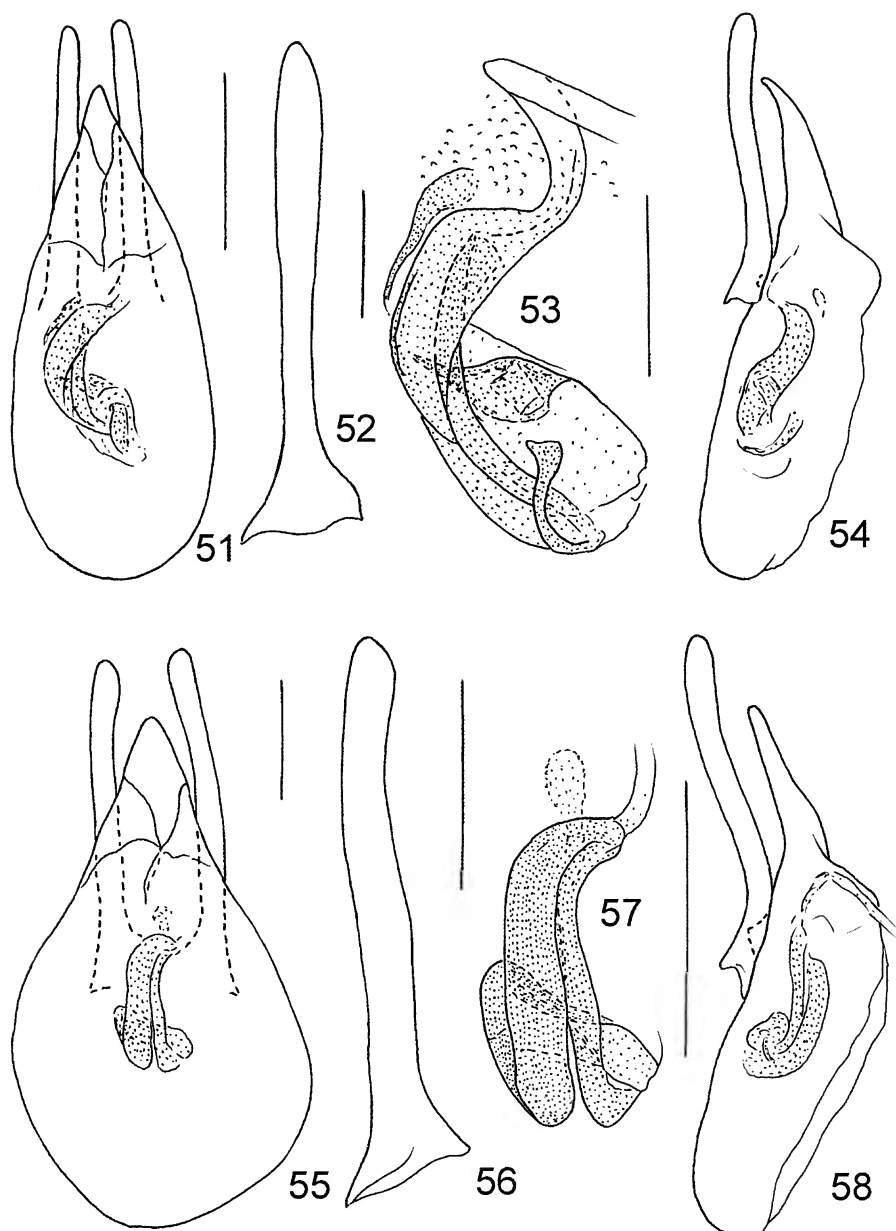
*COMMENTS:* This species is variable, particularly in size, elytral and meta-ventral punctation, and the basal striae of the elytra that may become very shallow. It may be distinguished from the similar *B. louisi* and *B. danielae* by the elytra with distinctly punctate surface reaching to, or almost to, sutural striae. In addition, it may be separated from these two species, as from other members of the group, by the shape of the parameres and sclerites of the internal sac.

***Baeocera wolfgangi* sp. nov.**

Figs 55-58

*HOLOTYPE:* ♂, LEYTE, Visca N Baybay prim. forest, 200-500m, 22.2.-10.3.1991, leg. W. Schawaller & al. / (SMNS).

*PARATYPES:* 2♂, with the same data as the holotype (SMNS, MHNG). – 2♀, LEYTE, SW Abuyog, 8.III.1991, forest, 100-300m, leg. W. Schawaller et al. (SMNS). – 2♂, 1♀, LEYTE, Lake Danao, 19.2.-8.3.1991 forest edge, 500m, leg. W. Schawaller & al. (SMNS, MHNG).



FIGS 51-58

(51-54) *Baeocera procerula* sp. n., aedeagus (51, 54) in dorsal and lateral views, paramere (52) and internal sac (53) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac. (55-58) *Baeocera wolfgangi* sp. n., aedeagus (55, 58) in dorsal and lateral views, paramere (56) and internal sac (57) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac.

OTHER MATERIAL EXAMINED: 6 additional specimens likely conspecific but in poor condition, with the same locality data but 100-200m, 21. and 27.II.1991 (SMNS, MHNG).

DESCRIPTION: Length 1.0-1.09 mm, width 0.70-0.78 mm. Body and femora dark brown, tibiae lighter reddish-brown, tarsi and antennae lighter than tibiae, yellowish. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 7: IV 8: V 9: VI 9: VII 12: VIII 11: IX 12: X 12: XI 14. Antennomeres III, V and VI evenly narrow, V and VI each about 5 times as long as wide; IV slightly narrower than VI; VII moderately wide, about 4 times as long as wide; VIII slightly wider than VI, distinctly narrower than VII, about 4.5 times as long as wide; IX to XI each distinctly wider than VIII, XI about 3 times as long as wide. Pronotum and elytra without microsculpture, with lateral contours separately arcuate; pubescence hardly visible at 50 times magnification. Pronotum very finely punctate, with lateral margins strongly convex, middle section of lateral margin carinae usually visible in dorsal view. Scutellum concealed. Elytra almost covering apex of abdomen, with lateral carinae concealed, or shortly exposed near base. Elytron with sutural stria shallow, curved at base to form basal stria reaching about mid-width of elytral base. Elytral punctation coarse and dense on entire discal surface, with puncture intervals mostly larger than puncture diameters, often some punctures about as large as intervals. Hind wings not reduced. Hypomera impunctate. Mesepimera flat, about 4 times as long as wide and about 3 times as long as interval to mesocoxa. Metaventrite somewhat convex in middle, with impunctate central surface small, around centre coarsely punctate. Lateral parts of metaventrite with irregular, coarse punctures larger than those around centre, not or slightly elongate and mostly smaller than puncture intervals. Submesocoxal lines parallel, with marginal punctures about as large as those around centre of metaventrite, not extended along anapleural suture. Submesocoxal area about 0.02 to 0.03 mm long, shortest interval between its margin and metacoxa about 0.08 mm. Metanepisterna indistinct. Metepimera impressed at inner angle. Abdominal ventrite 1 lacking microsculpture, with punctation coarse on entire surface, basal punctures not or barely elongate, contiguous in middle, basal rugosity absent. Tibiae straight.

*Male characters:* Tarsomeres 1 to 3 of forelegs barely widened. Aedeagus as in Figs 55-58, 0.25-0.28 mm long. Median lobe moderately sclerotized.

DISTRIBUTION: Philippines, Leyte.

ETYMOLOGY: The species is named in honour of my colleague and one of its collectors, Wolfgang Schawaller, Stuttgart, Germany.

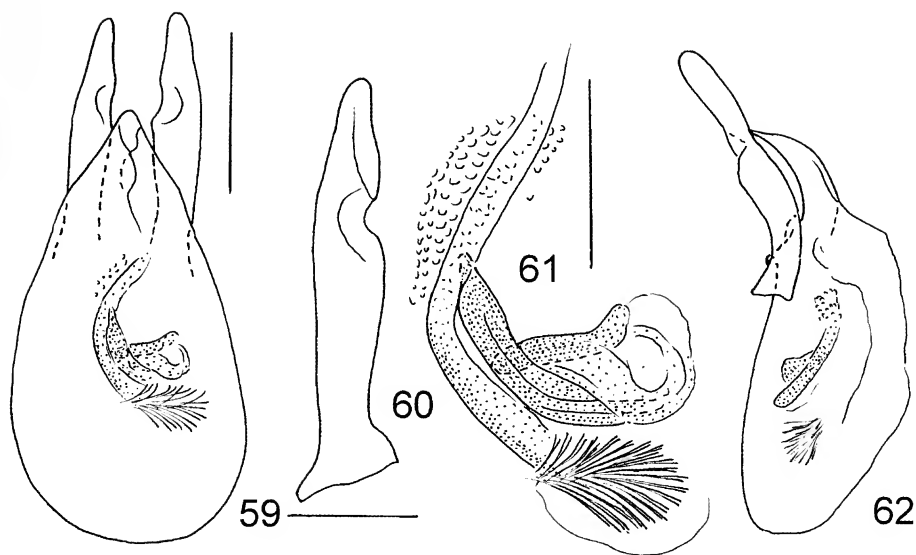
COMMENTS: The aedeagal characters of this species suggest close relationship with *B. louisi*. These species may be however readily distinguished by the elytra entirely coarsely punctate and the basal striae ending about at basal mid-width in *B. wolfgangi*, while the coarse elytral punctation is restricted onto a lateral surface and the basal striae are complete, joined with the lateral striae in *B. louisi*.

### *Baeocera ceylonensis* group

#### *Baeocera dilutior* Löbl, 1979

Fig 59-62

*Eubaeocera diluta* Löbl, 1972: 85; holotype ♂, ZMUB, type locality: LUZON, Prov. Nueva Vizcaya, Bambang.



FIGS 59-62

(59-62) *Baeocera dilutior* Löbl, aedeagus (59, 62) in dorsal and lateral views, paramere (60) and internal sac (61) in dorsal view; scale bar = 0.1 mm for aedeagus, = 0.05 mm for paramere and internal sac.

*Baeocera dilutior* Löbl, 1979: 86, replacement name for *Eubaeocera diluta* Löbl, 1971 (nec *Baeocera diluta* Achard, 1920).

MATERIAL EXAMINED: 8 ex., LEYTE, Visca N Baybay, prim. forest 200-500m, 22.II.-10.III.1991, leg. W. Schawaller & al. (SMNS, MHNG). – 1 ex., Visca N Baybay, 100-200m, 22.II.1991, leg. W. Schawaller & al., (SMNS). – 1 ex., Leyte, SW Abuyog, 8.III.1991, forest, 100-300m, leg. W. Schawaller & al. (MHNG). – 5 ex., LUZON, Lagunas Prov., Mt. Makiling, summit road, 450-550m, 20.XI.1995, leg. I. Löbl and 1 ex. with the same data but 400m, 19.XI.1995 (MHNG). – 1 ex., Lagunas Prov., Mt. Makiling 4 km SE Los Banos, 8.IV. 1977, leg. L. Watrous (MHNG). – 2 ex., Lagunas Prov., Mt. Makiling above Mad Springs 400-700m, 19.-22.XI.1995, leg. J. Kodada (MHNG). – 2 ex., Lagunas Prov., Mt. Banahaw above Kinabuhayan, 500 and 800m, 24. and 25.XI.95, leg. I. Löbl (MHNG). – 2 ex., Lagunas Prov., Mt. Banahaw above Kinabuhayan, Cristalino trail, 600-700m, 24.XI.95, leg. I. Löbl (MHNG). – 1 ex., Lagunas Prov., Mt. Banahaw near school above Kinabuhayan, 600m, 26.XI.1995, leg. J. Kodada (MHNG).

HABITAT: Specimens were found in primary and secondary rainforest, in leaf litter and under rotten bamboo debris.

DISTRIBUTION: Philippines, Leyte, Luzon.

COMMENTS: This species is difficult to distinguish by the external characters from *B. jankodadai*, *B. insolita* and *B. jeani*, while it is separated unambiguously from these species, as from other Philippine congener, by the aedeagal characters, in particular by the presence of a tuft of spine-like structures situated in the proximal part of the internal sac (Figs 59-62). All species of the *B. ceylonensis* group are similar in both, external and aedeagal characters. *Baeocera dilutior* differs clearly from the Taiwanese *B. semiglobosa* (Achard, 1921) by the distally narrowed flagellar guide-sclerite and

proximally parallel flagellar sclerite of the internal sac of the aedeagus. *Baeocera dilutior* may be separated from *B. franzi* (Löbl, 1973), known from Thailand and China, by the elytral punctation restricted onto smaller surface of the disc, and by the internal sac with patch of apico-lateral scale-like structures, while the latter consists of denticulate structures in *B. franzi*. *Baeocera ceylonensis* (Löbl, 1971), known from Sri Lanka and southern India, and *B. ventralis* (Löbl, 1973), distributed from Pakistan to Thailand, have the parameral notch situated more proximally than in *B. dilutior*. In addition, the sclerites of the internal sac are smaller in *B. ceylonensis* than those in *B. dilutior*, and *B. ventralis* has the apex of the flagellar guide-sclerite broadly rounded.

### *Baeocera monstrosa* group

#### *Baeocera alticola* sp. n.

Figs 63-66

HOLOTYPE: ♂, LUZON, Benguet Prov., Pacay, 2400m, nr. Sayangan, 11.VII.1985, leg. M. Sakai (MHNG).

OTHER MATERIAL EXAMINED: 1 ♂ in poor state, LUZON, Mountain Prov., Mount Data Lodge, 2200-2300m, 23-24.XII.79, leg. L. Deharveng & J. Orousset (MHNG).

DESCRIPTION: Length 2.20 mm, width 1.50 mm. Body black, abdomen somewhat reddish, apical abdominal segments lighter. Antennomeres I to III reddish-brown, IV to VI slightly darker, VII to XI distinctly darker. Femora and tibiae dark reddish-brown, tarsi lighter. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 10: IV 11: V 13: VI 10: VII 21: VIII 17: IX 22: X 24: XI 34. Antennomere III about 3 times as long as wide, segment IV about as wide as III, not quite 4 times as long as wide; V wider than segment IV, about 3 times as long as wide; VI notably wider than segment V, not quite twice as long as wide; VII much wider than VI, 3 times as long as wide; VIII slightly wider than VI, distinctly narrower than VII, about 3 times as long as wide; IX barely larger than VII; X and XI somewhat wider than IX, X somewhat more than 3 times as long as wide, segment XI about 4.5 times as long as wide. Lateral contours of pronotum and elytra separately rounded. Pronotum with lateral margin carina concealed in dorsal view, pronotal punctation very fine. Hypomera impunctate. Exposed part of scutellum large. Elytra weakly narrowing apically, with lateral margin carina visible throughout in dorsal view, lateral margins straight in middle third, sutural striae deep, curved basally to form basal striae extending to sides and joined with lateral striae; adsutural areas flat in basal third, slightly raised posterior basal third. Elytral punctation very fine in both, basal and apical fourth, irregular, fairly fine and scarce on large middle area, puncture diameters there much smaller than puncture intervals. Exposed parts of abdominal tergites very finely punctate. Mesoventrite with very fine median stria, lacking coarse punctures. Mesepimeron large, about 5 times as long as interval to mesocoxa and 4 times as long as wide. Median part of metaventrite convex, densely and finely punctate near metacoxal process, in middle impunctate, with fine punctures at each side of impunctate area. Lateral parts of metaventrite very finely and sparsely punctate, appearing impunctate. Metacoxal process horizontal. Submesocoxal areas 0.03 mm long, with marginal punctures fine, not elongate, reaching laterally level of tip of mesepimera. Metanepisterna flat, about 0.15 mm wide, weakly narrowing anteriad, with inner suture deep, slightly sinuate, impunctate, abruptly ending before reaching level of mesepimeron and not curved toward lateral



margin. Abdominal ventrite 1 lacking obvious microsculpture, with basal punctures fine, not elongate, without basal rugosity. Following ventrites very finely punctate and with barely visible punctulate microsculpture. Protibiae almost straight. Mesotibiae and metatibiae weakly curved.

*Male characters:* Protarsus and mesotarsus each with segment 1 strongly widened, wider than apex of tibia, segment 2 distinctly narrower than segment 1, segment 3 weakly widened. Apical lobe of abdominal ventrite 6 small, blunt, about 0.07 mm long. Aedeagus as in Figs 63-66, 0.82 mm long, strongly sclerotized.

DISTRIBUTION: Philippines, Luzon.

ETYMOLOGY: The species epithet refers to the high altitude at which the species was found.

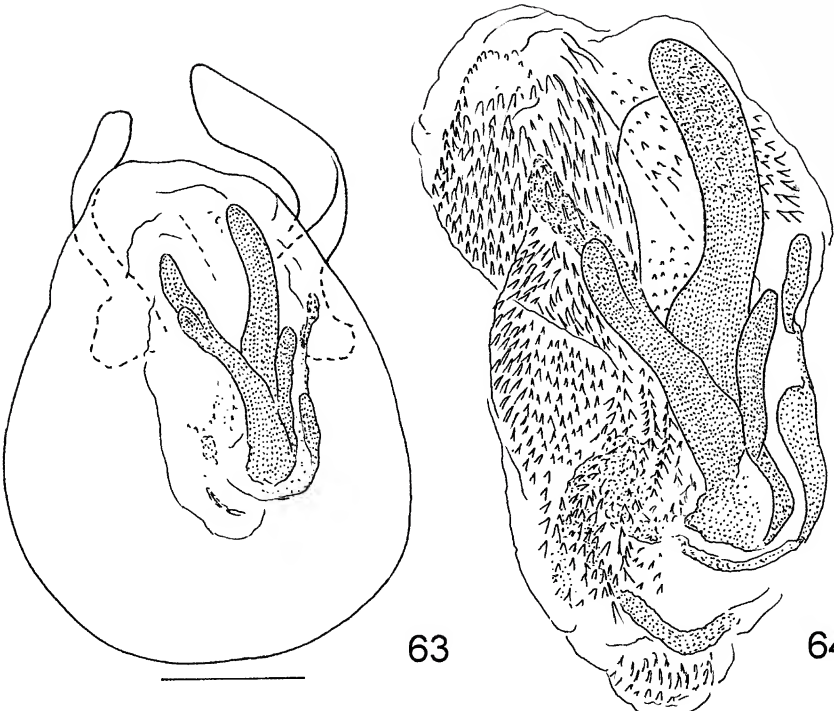
COMMENTS: This species shares with *B. robertiana* Löbl, 1990 the shape of the median lobe, in particular the apical process short, strongly inflexed, and in dorsal view completely overlapped by the basal bulb. Both species have the left paramere simple, lacking denticles and apophyses. *Baeocera alticola* differs drastically from *B. robertiana* by the right paramere narrower, almost evenly curved, and lacking inner membranous lobe and subapical tooth. It may be easily distinguished from *B. fortis* by its dark body colour and elongate apical antennomere.

***Baeocera fortis* sp. nov.**

Figs 67-70

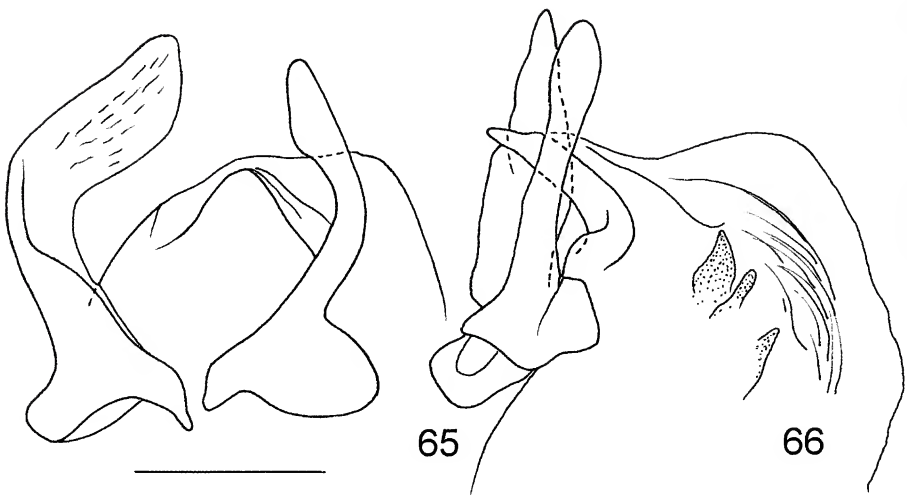
HOLOTYPE: ♂, LUZON, Lagunas Prov., Los Banos, 10.VII.1970, leg. M. Satô (MHNG).

DESCRIPTION: Length 1.95 mm, width 1.37 mm. Body reddish-brown. Antennomeres I to VI light reddish-brown, following antennomeres darkened, legs reddish-brown. Body convex dorsally. Eyes large. Length ratio of antennomeres as: III 11: IV 15: V 15: VI 16: VII 18: VIII 15: IX 18: X 18: XI 22. Antennomeres III to VI narrow, almost even in width, VI about six times as long as wide, following conspicuously wider; VII about twice as wide as VI and 3.5 times as long as wide; VIII slightly narrower than VII, about 4 times as long as wide; XI distinctly larger than preceding, 3 times as long as wide. Lateral contours of pronotum and elytra separately rounded. Pronotum with lateral margin carina concealed in dorsal view, punctation very fine. Hypomera impunctate. Exposed part of scutellum large. Elytra weakly narrowing apically, with lateral margin carina visible throughout in dorsal view, lateral margins straight in middle third, sutural striae deep, curved basally to form basal striae reaching sides and joined with lateral striae; adsutural areas flat. Elytra very finely punctate on basal sixth, punctation posterior basal sixth fairly fine and dense, with puncture diameters much smaller than puncture intervals, punctation becoming again very fine near apices. Propygidium and pygidium exposed. Propygidium with punctation dense and fairly coarse near base, irregular and sparse on remaining surface. Pygidium with distinct punctulate microsculpture and fairly coarse, irregular punctation. Mesoventrite with two parallel admesal striae, somewhat convex in between; punctate posterior mesoventral margin. Mesepimera about twice as long as interval to mesocoxa. Metaventrite convex in middle, impressed and coarsely punctate along margin of metacoxal process, with two admesal rows of fairly coarse punctures, on remaining surface very finely punctate. Lateral parts of metaventrite very finely punctate,



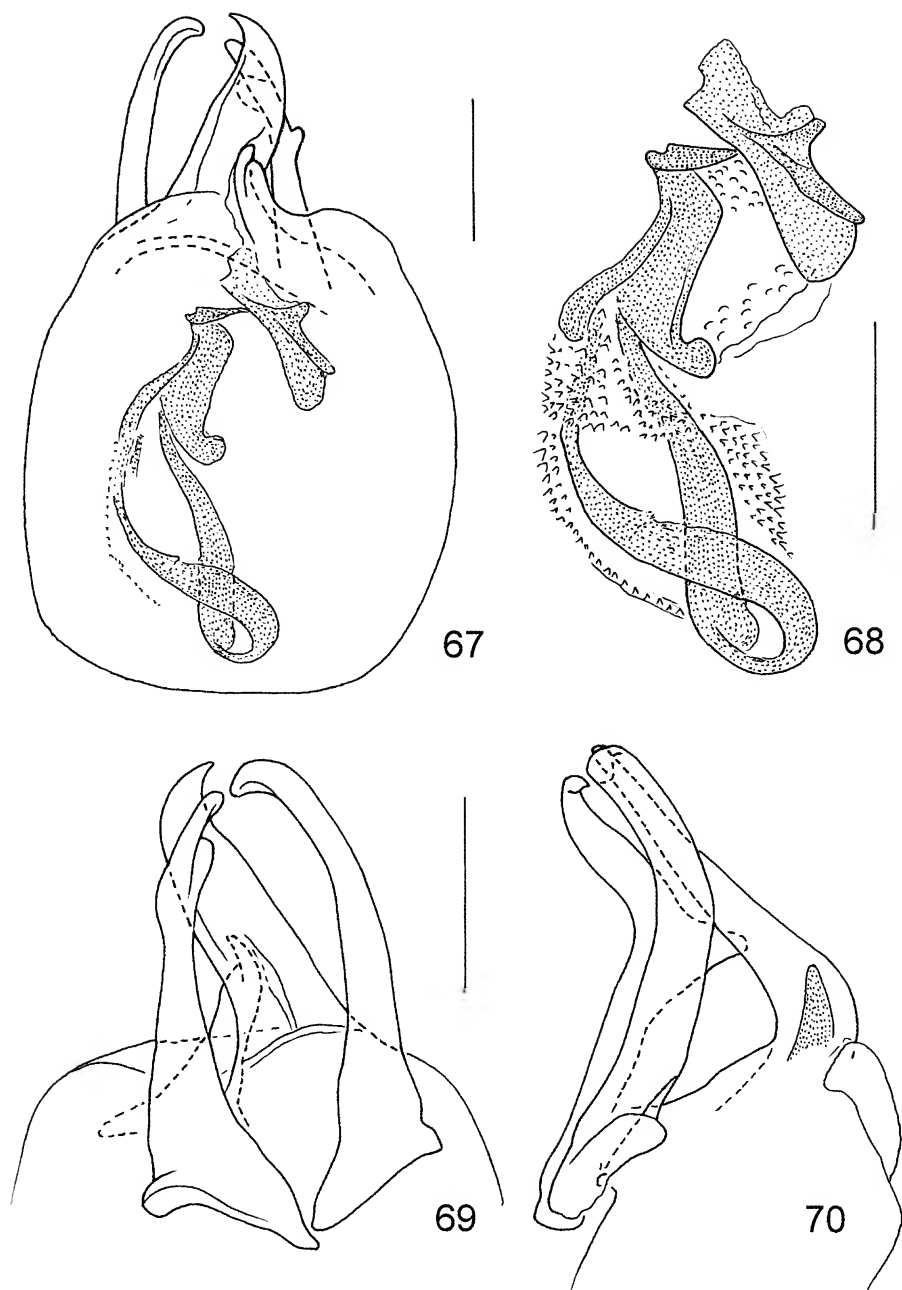
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64



65

66



FIGS 63-70

(63-66) *Baeocera alticola* sp. n., aedeagus (63) in dorsal view, internal sac (64) in dorsal view, (65, 66) apical part of median lobe with parameres in ventral and lateral views; scale bars = 0.2 mm for aedeagus, = 0.1 mm for internal sac. (67-70) *Baeocera fortis* sp. n., aedeagus (67) in dorsal view, internal sac (68) in dorsal view, (69, 70) apical part of median lobe with parameres in ventral and lateral views; scale bars = 0.2 mm.

appearing impunctate. Submesocoxal areas about 0.03 mm long, with coarse marginal punctures becoming elongate laterally and extended almost to mid-width of mesepimera. Metacoxal process oblique. Metanepisterna almost flat, about 0.12–0.13 mm wide, narrowed anteriorly, with suture deep, straight except at slightly rounded anterior angles, impunctate. Abdominal ventrite 1 lacking obvious microsculpture, with coarse basal punctures and short wrinkles; remaining punctation very fine. Following ventrites very finely punctate, with barely visible punctulate microsculpture. Meso and metatibiae straight near base, curved posterior basal fifth.

*Male characters:* Protarsus with segment 1 strongly widened, wider than apex of tibia, segment 2 distinctly narrower than segment 1, segment 3 barely widened. Mesotarsus with segment 1 strongly widened, narrower than apex of mesotibia, segments 2 and 3 similar to those of protarsi. Ventrite 6 with apical margin widely arcuate, barely prominent in middle. Aedeagus as in Figs 67–70, 0.97 mm long, strongly sclerotized.

DISTRIBUTION: Philippines, Luzon.

ETYMOLOGY: The species epithet refers to the robust (= strong) diagnostic characters defining the taxon.

COMMENTS: This species shares with *B. innocua* Löbl, 1990 the median lobe with a long, moderately inflexed apical process. It may be readily distinguished from *B. innocua* by the shape of the process that is wider and truncate at apex in the latter species, and by the shape of the parameres and sclerotized structures of the internal sac. See also comments under *B. alticola*.

## ACKNOWLEDGEMENTS

I am particularly indebted to Louis Deharveng and Jean Orousset, both from Paris, France, Jan Kodada from Bratislava, Slovakia, late Masataka Satô from Nagoya, Japan, and Larry E. Watrous from Ballwin, MO, USA, for the generously donated specimens from their collections. My thanks are also due to Johannes Frisch, Berlin, Germany and Alexey Solodovnikov, København, Denmark, for loans of type material housed in collections they are responsible for. Late Henry S. Dybas and Alfred F. Newton, Jr. from Chicago, USA, and Wolfgang Schawaller from Stuttgart, Germany, provided additional unidentified material.

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